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# PENNSYLVANIA GAME NEWS

JANUARY 1972

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### COVER PHOTO BY HELEN LEWIS

As regular GAME NEWS readers must know, our gun columnist Don Lewis, although constantly involved in all kinds of shooting, has a couple of favorite fields—varmint and squirrel hunting. Perhaps this is understandable, for these require super-accurate rifles and ammunition along with top-notch hunting skill, thus are demanding, satisfying sports. Our cover photo was taken during the last extended squirrel season. For an account of that hunt—and admission that he doesn't hit them all!—see Don's story beginning on page 8 of this issue.

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## **PGC Notes on 1971**

**A** NEW YEAR IS UPON US, and nobody knows what it will bring. Rather than speculate on the future, we'll again take a moment to look at the past and give you this reminder of the year just gone. We hope it was a good one for you and that 1972 will be even better.

In January, 1971, the first meeting of the Game Commission open to the general public was held . . . the white-tailed deer was the theme of the major exhibit for sports shows . . . about 60,000 young hunters received hunter safety training . . . E. J. Brooks, Lansdale, was named president of the Game Commission . . . the subscription price of GAME NEWS was increased . . . responsibility for the sale of hunting licenses (except for antlerless deer) was given to the Game Commission after having been handled by the Department of Revenue since 1929 . . . Pennsylvania's share of the Pittman-Robertson Wildlife Restoration and Research Funds was \$1,268,918 . . . 153,000 archers took 2998 whitetails during the 1970-71 seasons, their third best harvest . . . 53,350 antlered deer and 46,069 antlerless deer were taken, for the sixth highest buck harvest on record; the leading county was Bradford, with 2266 bucks . . . Sunday hunting was opposed by the Commission . . . 21,599 deer were picked up from the state's highways. . . .

The Commission's TV show, *Pennsylvania Outdoors*, was scheduled for every other week . . . the 14th class of officers was graduated from the Ross Leffler School of Conservation in March . . . deer and bear trophies were measured for Pennsylvania's fourth scoring program . . . hunting accidents were the lowest since 1964 . . . Pennsylvania's Constitution was amended to provide for the preservation and restoration of the state's natural resources . . . the Game Commission bought its 1,100,000th acre . . . snowmobile use on Game Lands was restricted and camping prohibited . . . the nonresident hunting license fee was increased to \$40.35 . . . more than \$220,000 was distributed by the PGC in lieu of taxes for Game Lands. . . .

Pennsylvania again was first in the nation in hunting license sales . . . recruitment for the 15th conservation officer class was begun . . . 313,850 antlerless deer licenses were made available . . . Andrew Long, PGC vice-president, was elected president of the Amateur Trapshooting Association . . . Governor Milton Shapp designated September 25-January 15 as "Hunt Safely in Pennsylvania Time" . . . a record 26,290 waterfowl hunters applied for the 1000 reservations at the Pymatuning Waterfowl Area . . . dog owners were urged to keep their pets from running deer . . . turkey populations were excellent, pheasants down somewhat . . . a new game take survey was developed . . . booklets on trapping and deer were made available . . . progress made on the Middle Creek Wildlife Management Area . . . fluorescent orange clothing was recommended for hunters . . . PGC and industry launched extensive program to open more privately owned land to public hunting . . . successful hunters were urged to return big game cards (only 81 percent did so last year) . . . Pennsylvania furs sold to dealers brought \$477,220.

Did you remember?—*Bob Bell*





J. Oughton



# ZANE GREY

## Pennsylvania's Writer of the Purple Sage

By G. M. Farley

**S**LOWLY THE sun crept behind the distant mountains and the wind died down. The cooling shade relieved the suffocating heat of the jungle. The hunter sat with his back against a clump of bamboo shoots, his 351-caliber rifle across his knees and an extra clip of ammunition beside him. He watched the gentle swaying of branches in the evening breeze as he strained to hear the faintest sound from the dense foliage surrounding the small clearing. Gradually his faculties tired, and he began to let his mind wander. Then a slight sound reached him. Warily he started to turn his head when a deep growl made him whirl.

A few yards from him stood a jaguar, lips curled back in a threatening growl, bared fangs glistening. The hunter quickly aligned his sights and fired. Dust flew from the hide as the bullet struck. The cat leaped straight up with a roar, and when he came down the hunter shot again.

The bullet went through the jaguar, and he leaped straight at the man with a strange hoarse sound. The hunter fired again and knocked the cat sprawling. Twice more he fired, neither bullet having much effect, and the maddened beast came on. Then he had to take precious seconds to put the other clip in the rifle.

The wounded jaguar leaped, landing within 25 feet of the man, but when he landed he rolled over. The hunter shot again. The cat got up, uttering a terrible roar, and sprang once more. The hunter fought to control himself.

Ten feet from the man the blood-spattered beast rose to its full height, pawing the air with great spread

claws, coughing bloody froth all over the hunter. Another shot struck directly between the wide-spread paws. The jaguar lunged blindly and fell over into a hollow. While the trembling hunter reloaded the clips the dying jaguar dragged himself into the gloom of the darkening jungle. . . .

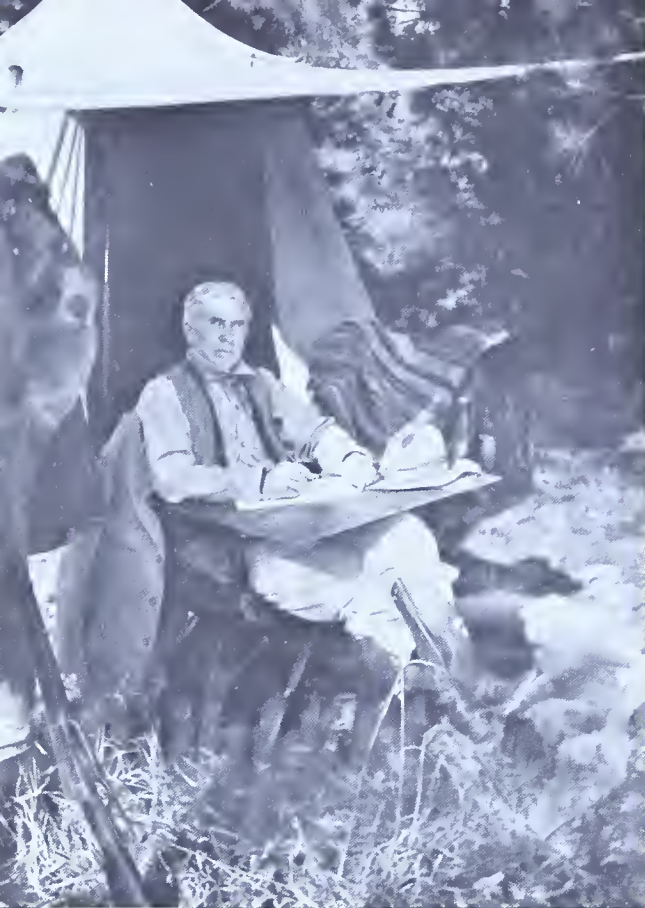
At least that's how the hunter later described the encounter. And even if the account wasn't literally true, it certainly made exciting reading—and that was this man's stock in trade, for he was the fabulously best-selling author, Zane Grey. The year was 1911 and Grey was exploring the Santa Rosa River in the heart of Mexico with two companions, a Mexican guide named Pepe and a young American named George Allen.

### Heritage of the Desert

Zane Grey had already attained a degree of success as a writer by the time he made this trip. His first successful Western romance, *Heritage of the Desert*, had been published the year before, and six other books of less than moderate success had reached the public.

Born in Zanesville, Ohio, on January 31, 1872 (not 1875 as has been erroneously reported for years), he was christened Pearl, an effeminate sounding name that he discarded in later years for his middle name Zane. On his mother's side he was descended from Colonel Ebenezer Zane, son of an exiled Dane who came to America with William Penn. It was Ebenezer Zane who blazed the first trail into Ohio. From these stalwart ancestors Zane Grey inherited a natural love for the outdoors.

Grey was not a studious person in



**ZANE GREY** takes notes for one of his Western novels while camped in Arizona's high country on hunting trip. Note M95 Winchester rifle.

the classroom. Frequently he found himself facing an irate teacher because he preferred daydreaming to studying. Graduating from high school, young Grey entered the University of Pennsylvania after receiving a scholarship because of his ability as a baseball player. Here he studied dentistry at his father's insistence, playing excellent baseball, and dreamed of things he hoped someday to do. Two years after his graduation in 1896, he set up an office in New York City and hung up a bronze plaque announcing that "Dr. Zane Grey, Dentist," was in town. His first office was at 117 W. 21st Street, but in 1900 he moved to 100 W. 74th Street just a few blocks from Central Park.

City life did not suit the young dentist. He longed for the outdoors—the forested hills, the open fields, the amber-colored trout streams and the winding bass-filled rivers. He was a

lonely man, often spending hours in Central Park feeding the squirrels and longing for far-away places. He joined a group of sportsmen which included Ernest Thompson Seton and Dan Beard. One of the members was the editor of *Recreation Magazine*. One evening Grey was telling them of a fishing experience on the Delaware River which forms part of the boundary between the states of New York and Pennsylvania. The editor asked him to write the story.

### First Story

Zane had written his first story at the age of 14, but his father, angered at the aspiring writer because of the stolen pots and pans found in a home-made cave where Zane's "gang" of boyhood scalawags gathered, consigned the manuscript to the fire and gave his son a sound whipping. This had temporarily quenched the desire to be a writer. Yet Zane accepted the editor's invitation without trepidation and the story "A Day on the Delaware" appeared in *Recreation*, May, 1902.

His literary appetite whetted, Zane Grey decided to write a book, and chose for his subject the story of Betty Zane, his great-great aunt. Betty had saved old Fort Henry (now Wheeling, W. Va.) by running a gantlet of Indian fire to carry an apronful of powder from Colonel Zane's cabin to the fort. Deviating from historical facts whenever it suited his purpose, Zane wrote her story in his inimitable style. *Betty Zane* was rejected by every publisher who saw it and finally the author borrowed money from his future wife and published the book at his own expense.

Zane married Lina Elise Roth in 1905, promptly gave up his dental practice and settled down to become a writer. For seven years he labored unceasingly, only occasionally seeing a fishing or hunting story reach print. His wife encouraged him, corrected his manuscripts, and taught him how



to write proper prose. Editors rejected his books and discouraged his efforts, but he refused to quit. He had made up his mind to become successful and his determination would not permit him to stop.

Then, in 1907, Alvah James introduced Grey to a friend, Colonel Charles J. "Buffalo" Jones. Grey talked Jones into accepting him as a member of his next expedition to rope mountain lions on the north rim of the Grand Canyon. It was on this trip that Zane Grey found himself and settled once and for all that henceforth he would write stories about the great American West.

### Visited Isolated Areas

Zane Grey's love for the outdoors and his constant searching for story material took him to many isolated parts of the West. Before writing *Thunder Mountain*, he spent weeks in the mountains of Idaho. Months were spent in the back country of Arizona researching such books as *To the Last Man*, *Under the Tonto Rim*, and *The Hash Knife Outfit*. He made several trips to fish the Rogue River in Oregon before writing *Rogue River Feud*, and even traveled into the interior of Australia to gather material for *Wilderness Trek*. He knew our West and loved it. In his earlier trips into Arizona he met many of the colorful characters he wrote into his stories, some of whom remembered well the days of gunfighters, cowboys, and hostile Indians.

During the 1907 trip with Jones, Grey reportedly almost lost his life to a mountain lion. The dogs had separated on lion trails and he had followed his favorite, a hound named Don. They had started back to camp when the dog struck a fresh lion scent, gave a yelp and bounded away to disappear down a break in the canyon wall. Grey dismounted and followed. Plunging down the rock-strewn slope, leaping from boulder to boulder, sliding and jumping, he

finally reached the edge of a deep, rocky chasm.

Don returned to him, the hair on his neck bristling. He had come from around a corner of wall where a narrow ledge ran, and where the lion apparently had gone. Grey strode out on the ledge and around the point of wall. The dog did not want to follow, but the wild impulse of youth led Grey on. The dog whined and growled, and finally got in front of the man, who was armed only with a holstered revolver and camera, compelling him to slow down.

The ledge narrowed until Grey had to turn sideways and creep along the ledge facing the yawning abyss. Refusing to heed the growls of the dog, he kept on. The ledge widened and came to another turn. Rounding this the man and dog suddenly stopped. The ledge ended, and before them lay the mountain lion, licking a bloody paw.

Buffalo Jones had warned the tenderfoot hunter never to take his eyes off a lion at close quarters. In his excitement, Zane forgot Jones' exhortation and began to fumble with the lens of his camera. Suddenly he heard a sound and looked up to see the lion not more than a dozen feet from him. Grey drew his revolver but could not bring it to bear on the lion long enough to fire. He began to back along the ledge, Don staying between him and the lion.

### The Mountain Lion Came On

Finally the man backed into the wall where the ledge narrowed. He could go no farther, and yet the mountain lion came on. The dog cowered at Grey's feet. Slowly he brought the gun to bear on the lion's head, made an effort to steady his arm with his left hand, and pulled the trigger.

The lion leaped up, beating the wall with huge paws. Then, as Zane Grey later described it, the huge animal seemed to propel himself outward into space, to tumble over and over



**ZANE GREY AND son Romer, with two bears taken under the Tonto Rim. Best known as a prolific writer, Grey was also a dedicated hunter.**

and vanish in the depths of the canyon.

Not all of Grey's escapades were near tragedies. While most were successful and all were exciting, some were even humorous.

Once he was on a bear hunt in the Tonto Basin of Arizona with his friends the Haughts. Somehow he had chosen for the day a horse that besides being extremely stubborn was a coward. Finally the horse ran away, throwing the rider and leaving him alone on a slope covered with manzanita and scrub oak. This was not a good place to meet a bear, and they were in grizzly country.

Presently a violent thrashing in the brush above him and the sound of a heavy animal running sent the blood racing through his veins. Extricating himself from the tangle of brush in

which he had landed, Grey peered up through the bushes and saw a huge red furry animal coming toward him. His first thought was that it was a "big cinnamon bear," and instinctively he threw up his rifle and fired.

The shot scared the animal and it came plunging and crashing toward the man. The rifle jammed. Dropping the useless gun the hunter whirled and ran at top speed. He reached a pine with low branches and almost ran up it, finally to straddle a large limb and turn his gaze back up the hill. To his amazement a red wooly steer, frightened out of its wits, plunged wildly by him. It was several years before Zane Grey mentioned this incident.

In 1907, *Shield's Magazine* published a poignant story of squirrel hunting in the Pennsylvania mountains near Grey's Lackawaxen home. Slowly, as his income increased, he graduated to larger game such as lion, bear, deer, and mountain sheep. But gradually he began to devote more and more time to big game fishing and less to hunting, although he still made long trips into the mountains and desert country. He wrote articles in favor of conservation, and decried the building of highways into the more remote areas of America.

#### **Under Mogollon Rim**

In the early 1920s, Zane Grey purchased a piece of property under the Mogollon Rim in Arizona and had a hunting lodge built on it. Time after time he returned to this remote spot to hunt, to write or to be alone. It required considerable time on horseback to reach it in those days. Now the lodge, which had deteriorated sadly, has been restored by a Phoenix businessman and a road has been built to it.

In 1931, Zane Grey and the officials of the state of Arizona had a misunderstanding over the changing of Arizona's hunting season which resulted in a lot of unfavorable publicity



for the writer, and he left the state never to return. This ended his days as a hunter.

Just prior to his death in 1939, Zane Grey began to make plans for a return trip to his beloved mountains of Pennsylvania. He had never forgotten the place where he had struggled so hard to overcome the obstacles facing him, and where he had first tasted the exhilarating wine of success. But death overtook him on an October morn before he could return. Today he rests beside his beloved Dolly in a cemetery on the shore of the Delaware River, just a few rods south of the home they once occupied together.

But the unquenchable memories remain, and in 1972 the world will show its gratitude on the 100th anniversary of his birth. A Zane Grey stamp is on the agenda, the Marlin Firearms Co. is manufacturing a beautiful, special 30-30 caliber rifle appropriately called "The Zane Grey Century," an anthology tentatively called *Zane Grey's*

*Tales of Hunting and Fishing* is scheduled for publication, and a television production company already has scheduled several TV specials such as *Zane Grey's West* and *Zane Grey's South Seas*. The \$400,000 Zane Grey-National Road Museum is due to be opened near Zanesville, Ohio, and another book, written by Dr. Carlton Jackson and dealing with the writings of the famous Western author, is scheduled for publication by Twayne Publishers.

But most of all the memories will remain, memories built from hours spent reading Zane Grey's stories of days gone forever, of valiant men with deadly black guns, of swift wild horses, of hard-faced outlaws and virtuous women. Others will remember his stories of lonely campfires, and red-walled canyons and purple sage, of blue seas and battling marlin, of silver rivers and leaping bass. Zane Grey left us a heritage, a monument that will stand forever.

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## *Books in Brief . . .*

*The Whooping Crane*, by J. M. Roever, Steck-Vaughn Co., Austin, Texas, 1971. 30 pp., hardbound, \$2.95. A beautifully illustrated children's book that gives much information on this interesting bird.

*The Venison Book*, by Audrey Alley Gorton, Stephen Greene Press, Brattleboro, Vt. 78 pp., paperbound, \$1.95. An engagingly written book that tells how to dress, cut up and cook your deer.

*If Deer Are to Survive*, by William Dasmann, Stackpole Books, Cameron and Kelker Streets, Harrisburg, Pa., 1971. 128 pp., \$4.95. A discussion of all a deer's needs and the environmental influences upon him. Should be read by everyone who hunts deer. A Wildlife Management Institute book.

*Mausers, Walther & Mannlicher Firearms*, by W. H. B. Smith, Stackpole Books, Cameron and Kelker Streets, Harrisburg, Pa., 1971. 239 pp., \$14.95. An outstanding reference work on these three makes of German firearms. Originally issued individually as *Mausers Rifles and Pistols*, *Walther Pistols* (revised to include rifles), and *Mannlicher Rifles and Pistols*, these three classics are combined here in one volume.

*Neighborhood Puddle*, by John F. Waters, Frederick Warne & Co., 101 Fifth Avenue, New York City 10003, 1971. 40 pp., \$3.95. Written for children, this book shows the inter-relationships of many life forms even in a tiny, temporary environment.

*The Patch of Woods With . . .*

# *Just One Squirrel*

By Don Lewis

Photos by Helen Lewis



**HELEN LEWIS** in winter squirrel woods using M75 Winchester 22 with 10X Litschert telescope. This combination has proved excellent on Pennsylvania bushy-tails.

I PARKED MY 4WD in a cleared off spot by the side of a dirt road, snapped off the lights, cut the engine and sat engulfed in total darkness. Outside the warm vehicle, the ground was covered with new snow and the temperature hovered at 20 degrees. It was a perfect morning for squirrel; however, I was filled with doubts.

As my eyes became accustomed to the darkness, I could make out the small stand of timber across the road that was my destination. As my doubts about this patch of woods grew stronger, I contemplated moving, but wanting to be in the woods and settled down by starting time, I decided to stay.

My doubts about this woods began a few days earlier. I had shot a grouse along its edge and my hunting partner commented that this stand of timber was so poor in food it couldn't support more than one squirrel. At that time, I was wearing a new 10-X blaze orange hunting jacket, and my friend wryly admitted that I would be the only bright spot in the entire woods. I ignored his remark. It was true that my jacket did stand out like a sore thumb, but I felt secure in the fact that at least I could be seen by other hunters.

This stand of trees wasn't more than 150 yards square, with the highest tree barely reaching 40 feet. Maybe it was because I had seen one little gray the day I shot the grouse that made me choose this spot, or it could have been that I simply wanted to prove to my friend that I was squirrel hunter enough to get squirrels where they weren't supposed to be. I zipped up



my jacket, checked to see if I had shells and carried my Remington 521T into the woods without a ray of hope.

I dug in beside a jagged stump and told myself that I would stick it out for two hours. I became so engrossed in assuring myself that I was wasting a good morning for squirrel hunting that I failed to see the big gray that came down a tree only 30 yards away. I was caught so completely by surprise, I just sat and watched.

When the gray slid around the base of a tree, I grabbed the rifle. As its head appeared on the opposite side, I squeezed off what I thought was a well-aimed shot. What I thought and what it turned out to be were totally different. The big gray bounded off through the snow and I cranked another round into the chamber. I lost the squirrel in a small stand of saplings and was about ready to put the rifle against the stump when I saw it looking directly at me over a rotting stump. This was the type of shot that I dream about. I eased the 521 to my shoulder and settled the cross hairs on the tiny target 40 yards away. I fired, but the gray was motionless for a second and then disappeared.

#### **Angered at Self**

Anger and disgust at my poor shooting rose through me. The first shot was nothing to be ashamed of, but the second from a sitting rest was humiliating in the least. I wanted to blame my outfit but I knew neither the rifle nor the Unertl 6X scope was to blame. I had sat too many evenings at the benchrest and shot dime-size groups at 50 yards with the target ammo that I was using now. The shot I had just missed represented a far larger target than I normally used to sight in the Remington.

While mentally chewing myself out, I was again caught off guard when the gray appeared on top of a stump 10 yards farther out and then vanished. I decided that I had better stick to squirrel hunting and do the



**AMONG THE LEWISES' favorite squirrel rifles are these: Browning T-Bolt with 4X Redfield; M-75 Winchester and 10X Litschert; M521T Remington with 6X Unertl. All are 22s.**

evaluating after I got out of the woods. I made a fortunate move when I picked up the rifle and got into position facing where I had last seen the gray, for I wasn't caught napping when its head came up above the stump. My shot hit squarely where the cross hairs intersected. As the gray rolled out into view, my confidence was once again renewed, and I had faith in myself and the very fine squirrel outfit I was using.

I didn't go after the squirrel, since it was obvious that my shot was a fatal one. That was fortunate, since two grays raced through the treetops far out in the woods. I suddenly became aware that this deserted, burned-out woods had more squirrels to offer than just the one my friend thought might be here. I became so intent on watching the squirrels well beyond my self-imposed limit of 50 yards that I paid no attention to several flashes I saw up in an oak tree about that

distance away. For some reason, a lot of leaves had stayed on this tree and the gray seemed to sense that he could use them for a shield. It took me several minutes of intense searching to locate the feeding squirrel. I found it difficult to follow the gray in the 6X scope, and I nearly fired on two occasions but managed to restrain myself until it spread out between two limbs, attempting to cut an acorn. I lost no time in freezing the reticle on its head and squeezing the trigger. I know I've made more difficult shots, but I still consider this one of the best shots I have ever made. The gray dropped from a perfectly placed bullet.

#### Hard-to-Beat Sport

I've always claimed that squirrel hunting with the ordinary or common 22 rifle is a sport that's hard to surpass. Years ago I'd done some squirrel hunting with a variety of shotguns, but I soon sensed that was no real challenge. When I switched entirely to

**DON LEWIS** gets ready to drop a bushy-tail from a distant oak with M521T Remington. He likes the precise adjustments and fine crosswires of target scopes for such shooting.



the rifle and accepted all the frustrations and disappointments that certainly plague the squirrel hunting rifleman, my interest surged to a new high and it grows stonger every year. Now I wait for squirrel season to pit my skill and woods knowledge against the wary tree climbers.

I've been fortunate to have used a number of fine squirrel rifles in the 22 line. I suggest that the squirrel rifle should be one with a heavier than average barrel and some type of adjustable trigger, but any conventional 22 rifle can be used with fair success.

I think highly of the 521T Remington, and my wife, Helen, can cut  $\frac{3}{4}$ -inch groups at 50 yards with her Browning T-Bolt and Redfield 4X scope. I'm lucky enough to also have a Winchester Model 75 semi-target with a 6X Unertl one-inch tube scope that has proved excellent in the squirrel woods. The one that I have used almost exclusively during the last two years, however, is a Model 64 Savage/Anschutz single shot. This is a semi-target rifle that may seem to be too bulky and heavy for hunting, but I have shot  $\frac{1}{4}$ " groups at 50 yards with target ammo. I just can't overlook this unbeatable accuracy, so I'll gladly endure its extra weight and unorthodox looks in the woods.

Although I had done fairly well getting two out of four, my pride was again to suffer. A dandy size gray came bounding along on the ground and stopped not more than 35 yards away. Without making any quick moves, I got the rifle rested against the stump, but only the squirrel's body was visible. I felt obligated to make a head shot with such a high quality outfit, so I waited until the gray's head protruded past a small sapling and fired—just as the gray jumped. The shot was so ridiculous, it made me laugh at myself. I had made plenty of misses in my life, but never so bad as this one.

I waited patiently as the gray bounded from tree to tree. When it



stopped, its head was just visible between two small limbs. This was a tough shot, but that's what I look for in squirrel hunting. I couldn't take a rest, so I cradled the rifle with my elbows on my knees, aimed and fired. The gray was gone, but I knew my shot had found its target.

Despite all the excitement of shooting three squirrels, the cold was still getting through my hunting clothes and I was satisfied to quit. I picked up the last squirrel I had downed and found a perfect head shot. The squirrel which had been reaching across the limbs was hit in the neck, but I considered it a head shot since the soft-point bullet came out between the ears.

I walked to the second stump and picked up the largest gray of the three. As I was stuffing the squirrel into my coat, I wondered if I could find any trace of the bullet that had missed while the squirrel was looking over the other stump. When I got to it, a dead gray was lying inside the hollowed out stump. I had shot at two different squirrels.

I left the woods convinced that squirrel hunting with a fine 22 rifle carrying a high quality scope is in a class all by itself. Since this episode, I've been frustrated and disappointed



**VETERAN STOCKMAKER** Randall Fredricks, West Kittanning, ponders blank he intends to install on rifle for a Pennsylvania hunter.

many times, but I never quit trying. I know that sooner or later a gray will stop long enough for me to get a head shot. If I miss, I've nothing to be ashamed of; when I connect, I get a feeling that's tough to describe. When a fellow gets four grays in one morning, that's rewarding enough—especially in a woods that is supposed to have just one gray squirrel in it. . . .

**BOY SCOUT TROOP 292, Gougiersville, shows some of the 80 bluebird boxes they built and installed on State Game Lands 106. With them are, left, Correll Sturgis, and Scoutmaster Allen Redcay.**

*Photo by Alex Nagy*





# Not My Best Day

By Bill Norton

**E**ARLY ON the morning of December 2, I was finally waking up completely. Bleary-eyed, I looked at the clock. Twenty to six. Late already. Looked like it wasn't going to be my best day. Putting on my insulated underwear, I checked outside to see how light it was. Still pitch black. I stumbled down the stairs. At least I had all my gear together.

"Where are you going to hunt?" Dad asked.

"Over by the line fence. I've had good luck over there."

I fixed a sandwich for noon. Knowing I would probably eat it at nine. It now was five to six. And I still had work to do.

"Don't forget you have to clean up the barn floor and lime it."

"Yeah. I'll get it." I should've stayed home last night, I thought. But I had a good time, and it's too late to worry now. Six o'clock. Only time for a glass

of milk. Some breakfast that was.

Dad left for the barn. I put on heavy wool hunting socks and insulated boots, shrugged into my hunting coat as I walked across the kitchen to get the sandwich. I got some shells and my binoculars from a drawer, grabbed my gloves, wool hat and rifle, and headed for the barn.

After finishing my neglected job I headed for my stand, studying the wind as I walked. That's what will determine my stand and hunting plan for the day. It's from the south, which is good. I can go with my first plan. I moved along a stone wall so I wouldn't be quite so conspicuous. Now and then I checked the area with the glasses. I could see much better with them, although things were still pretty dark. The stone wall ended and I walked through an open pasture about a hundred yards. I moved very slowly so I wouldn't disturb any game



in the area. I hoped to see a buck. Even if I did, it would be hard shooting in this light.

Finally I made it to my stand, a huge maple on the north end of a knoll about 30 yards from a hardwood forest which had been logged several years before. I loaded my long-barreled 30-30. Ahead and to my left stood a grove of hemlocks between the line fence and the crest of the knoll. I could see down the knoll for about 75 yards. Then there was another grove of hemlocks and a hardwood forest below that. Off to my right, below me and over the knoll, was a spring which ran into the woods. On the other side of the spring was another knoll. I would have an excellent view from my stand as soon as there was a little more light.

I stood up to get a better view. About five minutes later I heard deer off to my left in the woods. Shortly afterwards two deer ran into view. I thought they were does but I wasn't sure and I saw no other deer so I started to move along the hemlocks to cut them off. But as I took a few steps I saw another deer move, and I immediately saw that it had a rack. It was a good rack, high and even. Probably an 8-point. But he didn't offer a good shot and he wasn't scared, so I passed up the chance in hopes of cutting him off down among the hemlocks. I eased about halfway into the hemlocks but I never saw him again. I stood in one spot for 20 minutes, became restless and moved to a lone hemlock on the south end of the knoll, where I knelt down and waited.

### A Limb Snaps

Ten minutes later I heard a limb snap. I froze, watching the hemlocks below me. In a few minutes I saw two does plainly and detected the movements of another deer. I waited . . . and waited. Finally two fawns joined the two does and the fifth deer

turned out to be a doe also. I watched these five for almost a half hour, hoping a buck would follow, but none did. The deer grazed as if nothing were going on, although there had been shooting in the area. Then they detected me and went across the spring and over the other knoll and out of sight.

I was about to move when I heard someone walking through the woods. He came out of the hemlocks and I talked to him. He was a man about 60, my height, and had on a bright-red coat and an orange hat with a patch on it from some sportsmen's club. He was carrying a rifle of the same caliber as mine only much shorter and newer.

"Had any luck?"

"No," he said, "I've only seen a few does."

"I saw five a few minutes ago."

"Maybe they're the same ones I saw."

"Maybe. Well, good luck."



**TWO DEER RAN into view. I thought they were does but I wasn't sure, so I started to move along the hemlocks to cut them off.**

"Yeah, good luck to you," he returned.

I slipped into the hemlocks. I could move quietly because there were no leaves on the ground and I had broken a path through during small game season. I moved slowly and stopped often, looking around carefully. I worked through the hemlocks in about ten minutes and now was in the hardwoods. And about 75 yards and 25 minutes later I saw another hunter. This time we only exchanged waves and were on our way.

As I eased along and time passed, I started to move a little faster. This came from not seeing deer and was the best way to keep it up. I was continually reminding myself to slow down. By this time I was almost to the end of the woods. These woods broke into our lower pasture which was along the creek. Just before I reached the pasture I heard the sound of deer running. I moved farther back into the woods and knelt down. I saw the deer, but thought both were does, though I couldn't tell for sure. They went out of sight.

### Into the Woods

I headed out of the woods into the southeastern corner of the pasture, across the creek and into a clearing. I stood awhile at one end of the clearing, then moved into the woods and up the ridge until I could watch all the way to the top and almost all the way to the bottom. I sat down at a good vantage point and ate half my sandwich . . . about nine o'clock as I expected. The woods weren't awfully thick and if the angle were right between deer and hunter, one could shoot 85 to 100 yards.

I was a bit discouraged by this time and beginning to think of Saturday. I got up and moved about 50 yards when I heard a noise up the ridge and a little ahead. I saw a doe looking at me. We watched each other for a second (more like 10) and then I heard a noise directly ahead of me. As

I turned my head I saw a deer take just one bound and go out of sight behind some big rocks. As soon as I saw the deer I saw the rack.

As I waited for the deer to move, I began to shake. I forced myself to calm down, knowing I would spoil my good chance otherwise. If the deer moved I would see it, and it did—but a tree was hiding the front half and I didn't want to shoot. Another step and it was in the clear and broadside to me. I fired.

Missed! How did I miss? No time to waste now. I levered in another shell, picked a clear spot ahead of the deer and fired as he came through. I missed again, repeated the procedure, missed again. But after that shot the buck stood perfectly still. One last chance.

I already had a shell in the chamber and the hammer back but there was one problem. Between the deer and me was a small hemlock tree which had grown about five feet up without a branch, then for about three feet had a normal growth. But only the



**AFTER I SETTLED** down I remembered that I had to clean and tag this prize of mine. That took me about 20 minutes.



outer edge of this was going to hinder my shot, so I aimed for the base of the neck and fired. The deer dropped in his tracks. I hurried down the ridge to him, muttering, "I got him, I got him."

I soon settled down. Now I remembered that I had to clean and tag this prize of mine. That took me about 20 minutes. I washed my hands in a small creek, walked back to the deer, sat down and ate the other half of my sandwich.

After all this I slipped one end of the rope over the antlers, picked up my 30-30 and grabbed the other end of the rope in my hand. I must have dragged the deer about 150 yards, with frequent stops, when I came to the open field on our side of the fence. I dragged the deer through this field and to the creek. The creek wasn't very large but it had a fairly swift current. If I dragged him in and the current took him, I'd never get him back. Besides, I didn't want to get him

wet. So I ended up carrying him across the creek. After this I was able to drag him uphill only about 60 yards, so I pulled him between two small hemlocks and covered him with branches.

About halfway up to the house I saw a hunter on our land. He came over and while we were talking I told him of my predicament. He offered to go up and tell my dad, so I went back to the deer and waited. Soon I could hear the tractor coming across the open pasture. In no time at all the deer was tied on the tractor and a short time later it was hanging in a tree behind the house. I went inside, put away my hunting coat and rifle, and yawning, sat down in an easy chair to catch up a little on the sleep I'd missed last night. As I was dozing off I found myself wondering why I did this. But whenever someone asked me if I got one, my reply would be, "Yeah, a 6-pointer." Then, I knew why.

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## Book Review . . .

### Two New Books in the Living World Series

Nature lovers, amateur naturalists, sportsmen and children will find *The World of the Otter* by Ed Park and *The World of the Snake* by Hal H. Harrison informative and entertaining. Written primarily for the layman, the works are well documented. Quality black and white photographs depict the daily routine and characteristics of each subject.

*The World of the Otter* presents the otter as a fun-loving animal, but stresses the important aspects of its life. After a general introduction, the book details a year of the otter's life. Many unusual facts are pointed out—for instance, otters have been used to retrieve ducks by a modern hunter and in China for fishing about 600 A.D. Finally, the impact of pollution and DDT on otters is presented, since they are the end of a food chain.

Hal Harrison's *The World of the Snake* provides a wealth of information on snakes found in North America. Man has both a fear and intense interest in these creatures, and the views of several cultures are explained. Detailed line drawings will prove useful in identifying various species. The role of snakes in the environment is discussed and a note of concern for both man and snakes is expressed.

*The World of the Otter* and *The World of the Snake*, each 160 pp. and \$5.95, are published by the J. B. Lippincott Company, East Washington Square, Philadelphia, Pa. 19105.

# *A Bit of Green*

By Ken Calnon

**W**INTER, with its somber tones, clutches the forest and fields. Most trees have lost their foliage and stand bare and stark against a leaden winter sky. Also, the majority of plants have surrendered to the cold and are now in a state of dormancy. The outdoors has a complete look of bareness. Is there a spot of green anywhere?

Fortunately, a select group of trees and smaller plants remains green throughout the entire year. Tall coniferous trees stand out against the distant hillside; rhododendrons with their long shiny leaves form a lustrous green canopy over a mountain brook, and several species of ferns remain green throughout winter too.

Specifically the following green plants may be found throughout the winter season. They are described below for easy identification.

## **Wintergreen**

Wintergreen is one of our most abundant evergreen plants, and it often grows in large colonies that form dense mats on the forest floor. It is



commonly called teaberry because of its savory, pea-sized, bright red berries that appear in autumn. These berries have been longtime favorites of the country folks as well as the ruffed grouse.

The four- to six-inch plants rise on a thin stem; at the tip of the stem are three to four leaves, shiny, thick, oval and one to two inches long. In July, small bell-shaped waxy-white flowers dangle beneath the leaves.

Wintergreen leaves may be used as a tea substitute by crushing them in boiling hot water and then allowing them to steep in the water.



## **Spotted Wintergreen**

This plant can be identified by its dark green leaves, striped with white on their upper surfaces. Individual leaves taper to a point and have toothed margins. The handsome leaves stand out boldly against the forest floor, and they are arranged in whorls of three. It, too, bears waxy-white flowers in July. A thin stem growing above the leaves divides into two or three smaller stems that support the



light flowers. Prior to fertilization, the flower stems are bent downward; however, after the flowers are fertilized, the stems become erect. The seed pods then begin forming on the stem tips.

### Winter Cress

The dreary winter fields are brightened by the shiny green rosettes of winter cress, which is a member of the



mustard family. Each rosette consists of many kidney-shaped leaves which have been growing and forming all winter. It is worth knowing that these new leaves are comparable in flavor to dandelion, and they are ready to eat in late winter. Winter cress is prepared in the same manner as dandelion; however, while cooking the greens, the water should be changed twice to remove their slightly bitter taste. Serve with a sour bacon dressing.

Wintercress is well known in spring by its flowers that cover April fields with yellow.

### Downy Rattlesnake Orchid

This orchid is one of the most attractive winter plants of the forest, and it often grows in company with others of its kind. A dark green to bluish green color forms a rich background for the striking white midrib and the numerous white cross-veins that create a checkered pattern on the leaf's upper surface.



In midsummer the rosettes are topped by a spike of white flowers on a long, slender wooly stem. Total plant height when flowering is 10 to 18 inches.

### Trailing Arbutus

Small groups of these evergreen plants add a bit of green to winter's darker days. Their leaves are thick, oval and leathery, two to four inches long. Where the leafy litter is thick, arbutus plants are usually concealed among the fallen leaves.

During early spring, these plants produce clusters of small, spicy, fragrant white or pink flowers. A single flower is tubular at its base, and then



expands into five pointed lobes. After the flowers are finished blooming in late spring; new leaves of bright green began appearing quite conspicuously on the plants.





### **Common Polypody**

Most species of our ferns have surrendered their delicate fronds to winter's harsh elements; however, polypody or rock fern still remains green in spite of the severe weather. When the mercury dips extremely low, polypody curls its leaflets, as if trying to keep warm.

Rock fern, as it is sometimes called, is a small plant, six to 12 inches high, which grows on rocky slopes and outcroppings. Although these localities offer a marginal foothold, polypody thrives well in their very shallow, rich, woody, sub-acid soil. Leaflets are cut alternately into a solid midrib; each leaflet has a rounded tip and a smooth margin. Both surfaces of the leaflets are also smooth, except those that have fruit dots underneath. Yellow in summer and brown when ripe, these fruit dots produce the reproductive spores. The frond is wide at its base, tapering toward the tip. Polypody often forms dense stands on steep mountain slopes.

### **Leathery Grape Fern**

Winter's moist woodlands and damp fields are the homes of leathery grape fern, the largest of the little grape ferns. Five to eight inches high, it is a stout plant with leaves about three inches long, three inches wide and



broadly triangular. The leaves are cut into three to five sections, and they have a leathery appearance. In late summer, just above ground level, a smaller stem branches upward from the stipe or stem; on the tip of this new stem is a cluster of sporangia which produce the reproductive spores. Upon ripening, the sporangia split and release the spores into the air, starting the fern's life cycle anew.

### **Christmas Fern**

Long, tapering, rich green fronds of the Christmas fern grow in bouquet fashion, gracing the gray winter slopes. Christmas fern is a hardy plant, and it remains green even under a deep blanket of snow. The sterile





fronds are a picture of beauty, being leathery, lance-shaped and tapering upward from the middle. Fertile fronds differ from sterile fronds in that about midway up the frond, the leaflets become noticeably smaller. These smaller leaflets bear two or three distinct rows of fruit dots which produce the reproductive spores. Leaflets are also lance-shaped, prominently eared and have bristle-tipped margins. Christmas fern averages one to two feet in height.

### Partridge Berry

Among the brown litter of the forest floor, partridge berry spreads its trailing stem and leaves of glossy green, adorning the small area in which it grows. Its rounded or heart-shaped leaves, veined with white, are arranged in pairs along the stem. They



are the key to winter identification of the partridge berry. This plant is of small proportions, but it can be viewed by careful observation among the fallen leaves.

In June and July, two white fragrant flowers, joined at a single base, appear at the tip of the stem. *Two* flowers are required to produce *one* shiny, red berry that bears the mark of the two calyxes (sepal groups). The small fleshy fruits are edible, but have little or no flavor.



### Tree Club Moss

Winter's woodlands are enhanced by this green plant which resembles a miniature evergreen tree, eight to 10 inches high. These dark-green plants grow as individuals in damp open woods, sprouting upward about every six inches or more from a creeping, horizontal underground stem. The leaves are very small, about one-quarter inch in length, lance-shaped with sharp, pointed tips.

During early summer, several green strobili, which produce the reproductive spores, appear on the upper branches of the plant; they are approximately one and one-half inches long, cylindrical and sessile. When the spores ripen, the strobili turn yellow, and their spores are readily discharged by merely touching the strobili. After the spores are released, the strobili become brown, and they remain on the plant throughout winter.

# About Snow

Eugene R. Slatick



**SNOW CRYSTALS COME** in many designs—all beautiful. Their six-sided shape was recognized more than 2000 years ago, is still fascinating.

**T**HIS IS THE season for snow—the time when the Snow Spirit of the Delaware Indians comes down from his home in the north and wanders across the state. Nature starts preparing for the snow months before the weatherman tells us to expect it. As long ago as last summer our part of the earth began tilting farther and farther away from the sun, as if it were trying to avoid the heat and the glare. Gradually, the days became shorter and colder, the wind brisker. And now the stage is set for snow.

Snow starts to form when the air is cold and tiny ice crystals in a cloud absorb moisture and grow. At a certain point they get heavy enough to

fall, sprinkling the air with countless snow crystals. They are six-sided, or hexagonal, in shape and can range in size from about 1/1000 to ½ inch. Although usually pictured as starlike, snow crystals can be six-sided plates and columns, and needles. They come in a great variety of designs. A well-formed crystal is a delicate work of art.

## Crystals Collide

Snowflakes form when two or more snow crystals collide and stick together. If snow crystals or snowflakes pass through moist air they can become coated with ice. This type of snow, called snow pellets or graupel, is crisp and noisy. It differs from sleet, which is frozen rain.

The first snow is something of a notable event. It seems to mark the start of winter, which has the official starting date of December 22. October is usually the time for the first snow in the northern parts of Pennsylvania. It generally doesn't amount to much, but some places can get more than just a flurry. As a recent example, on October 17, 1970, Carrolltown, Montrose, Pleasant Mount, and Lawrenceville reported an inch or more of snow.

November is a little more certain to bring snow. In 1970, there were traces of snow during the first half of the month. By Thanksgiving most of the state had snow. It formed a thick blanket in parts of the northwest: on the 23rd, Erie was covered by 15 inches; on the 24th, Corry was digging out from 18 inches, Meadville from 10, and Bradford from eight.

By December we are usually conditioned to expect snow in the weather forecast. Deer hunters look for it. Fresh deer tracks in the snow are tantalizing proof that the hunter's



quarry is in the area. From January through March snow is common, especially in the northern counties. In 1971, New Year's Day brought the biggest snowfall of the month to the eastern part of the state. When it stopped, there was a white blanket ranging from about five inches at Philadelphia and six inches at Matamoras to 14 inches at Shippensburg.

### Notorious March

March is the time when we weary of winter and start looking for signs of spring. But we know that the month is notorious for heavy snowfalls. For instance, on March 4, 1971, the Snow Spirit covered Galeton with 15 inches, Towanda with 14, Indiana with nine, and Pittsburgh with almost eight. April is usually free of snow. Sometimes, however, the Snow Spirit seems reluctant to leave. In 1971 he stayed around until April 25 and sprinkled about an inch of snow on Matamoras, Meadville, and Kane.

Of course, the amount of snow that falls over the years is as changeable as the weather that brings it. Some years the winters are "old-fashioned," with plenty of snow. During other years the snowfall is so light that grandfathers and old-timers have no trouble convincing youngsters that the winters of the past were really winters. The fluctuation of the total snowfall at six Weather Bureau Stations for the winters of 1950-51 through 1970-71 is shown on the graph accompanying this article.

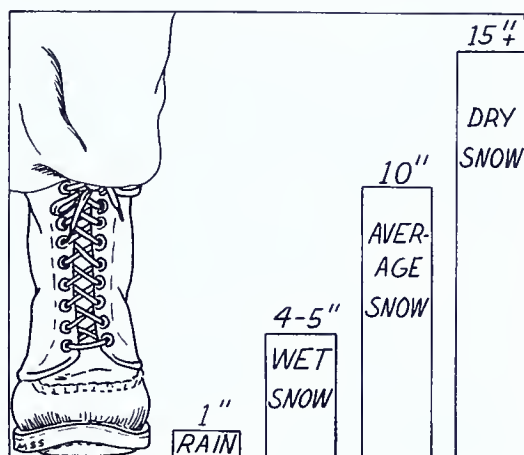
In general, the northwestern part of the state gets the heaviest snowfalls. Lake Erie is partly to thank (or blame) for this. When cold, relatively dry air from Canada flows over the lake it absorbs a lot of moisture, which is deposited as snow farther inland. Snowfall is heavy in Erie, but in places like Corry and Kane it is often heavier. Corry, for instance, has had a winter snowfall of more than 200 inches. Winter snowfalls in parts of the Allegheny Mountains, as at Donegal and

Somerset, can reach 70 to 90 inches. Snows of 40 to 60 inches, sometimes higher, are common in the northern counties. Elsewhere, the snowfall is less.

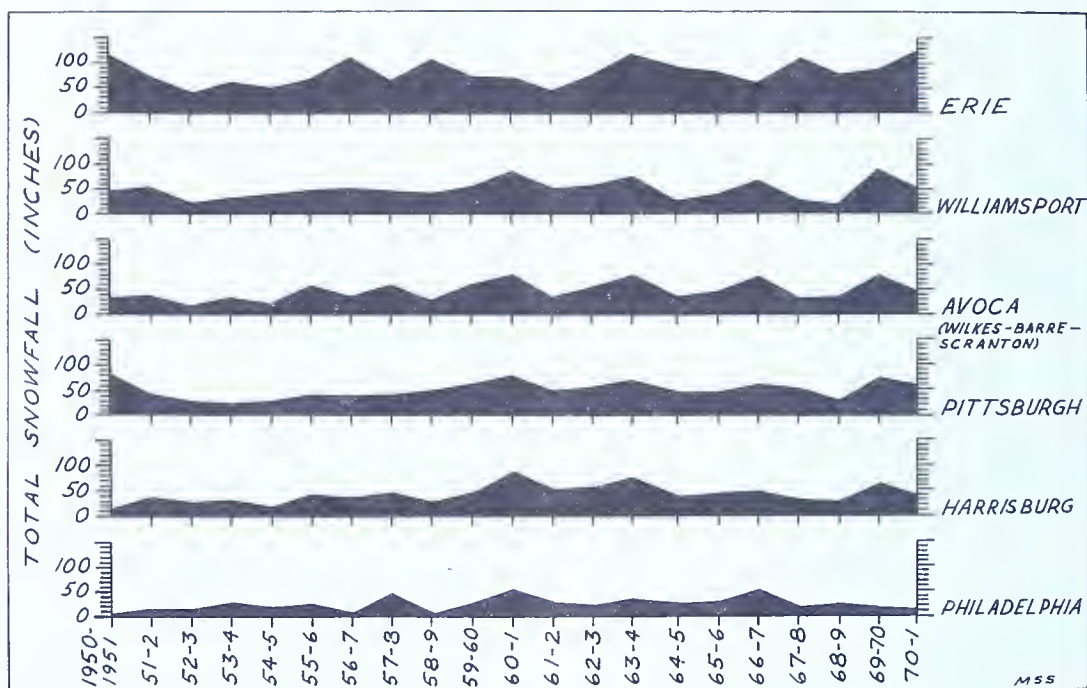
In terms of rain, one inch of freshly fallen snow is approximately equivalent to 1/10 of an inch of rain; so, 10 inches of snow equals about an inch of rain. When the snow is very wet, only four or five inches are needed to equal an inch of rain. By contrast, a dry, powdery snow may have to total 15 inches or more to equal an inch of rain. And just how much water does snow contain? An inch-thick blanket of an "average" snow has about 2,700 gallons of water per acre.

We quite naturally measure snowfall in terms of depth—we have to walk or drive in it. But anyone experienced with a snow shovel knows that snow can also be measured in terms of weight. The wetter the snow, the more it weighs. A cubic foot can weigh up to about 50 pounds. A 10-inch blanket of an "average" snow weighs more than 100 tons per acre.

Freshly fallen snow is usually bilowy because it contains a lot of air. Eventually it settles, and fluffy mounds become flattened piles of packed snow. This old snow is still more than half air.



**THE THICKNESS OF** freshly fallen snow depends greatly on its wetness. This drawing shows the relationship between an inch of rain and different types.



**SNOWFALL IN PENNSYLVANIA ISN'T** the same each winter, as this chart shows. Over the years the snowfall has had a somewhat cyclical pattern.

Curiously, because of the air in it, a blanket of snow can help keep things relatively warm. Like the air in the blanket for a bed, the air in the snow acts as an insulator. So, although it itself is cold, a blanket of snow is able to protect seeds, seedlings, and plant roots from freezing in very cold weather. The temperature of bare ground fluctuates much more than ground covered by snow. Small animals can find protection in snow dug-outs during very cold weather. The insulating quality of the snow helps keep the animal's body heat in and the cold air out.

#### Chilling Surface

By contrast, a blanket of snow also acts as a chilling surface for the air over it. Most outdoorsmen know from experience that a wind blowing across a snow-covered field is biting. Furthermore, because snow reflects most of the sun's rays, it doesn't allow us to get the full warmth from the winter sun.

A popular question each winter is

whether the winters are getting better or worse. The general consensus is that the winters of our forefathers were often more severe than those of today. David Ludlum, writing in "Early American Winters," reports that while many early winters were hard, some were mild, sometimes for several years in succession. A few of the outstanding snows of the past were in 1803, when snow was reported in Philadelphia in May 7; in 1807, when an "April Fool's Day" snowfall blanketed Huntingdon with almost three feet; in 1816, the "Year Without a Summer," when northwestern Pennsylvania had snow in June; and in 1888, when on March 11 a great blizzard swept up the east coast.

Looking to the future, some scientists predict that the winters will be longer and colder. Some even expect the start of a new Ice Age. Pennsylvania has been through at least two of them; in the geologic past, glacial ice covered parts of the northwest and northeast.

Snow is a controversial thing. Some-



times we are glad to have it, and sometimes we dread it. In the city and on the highways—the realms of man—a snowfall can be bothersome and even hazardous until it has been plowed or shoveled out of man's way, usually at considerable expense. Only then can urbanized man venture out to view and, perhaps, enjoy the snow.

But the woods and fields—the “country”—just accept the snow. New landscapes appear in sharp detail. Scarred land is reclaimed by a snow blanket. Snow drifts display the sculpturing talents of the wind. And the white, crystalline blanket invites boots, skis, sleds, and snowshoes. Anyone going out in the country to enjoy a snowfall gets a lot of encouragement from nature.

You don't really need a reason to enjoy a snow, either in the country or

the city. For youngsters, the snow is reason enough. But if you are looking for an excuse, you can take a lesson from Henry David Thoreau. When he was at Walden Pond he often tramped through the snow just “to keep an appointment with a beech tree, or a yellow birch, or an old acquaintance among the pines.”

#### FOR FURTHER READING

*The Wonder of Snow*, by Corydon Bell, Hill and Wang, New York City, 1957.

*Snow Crystals*, by W. A. Bentley and W. J. Humphreys, Dover Publications, New York City, 1962.

*Field Guide to Snow Crystals*, by Edward R. LaChapelle, University of Washington Press, Seattle, 1969.

*Early American Winters* (Two Volumes), 1604-1820, and 1821-1870, by David M. Ludlum, American Meteorological Society, Boston, 1966 and 1967.

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**EACH YEAR, MEMBERS OF THE Loyalsock Creek Men's Club and the Boy Scouts gather litter along Loyalsock Creek. Trucks are provided by the Department of Forests and Waters, the Game Commission, and club members. Detective Carl Benson and Sergeant Clifford O'Neal, State Police Barracks, Montoursville, here direct operations. Afterwards, all enjoy hot cakes and sausage prepared by the ladies' auxiliary.**







CHUCK  
RIPPER

# *Happiness Is a Brace of Grouse*

By Gary M. Schweitzer

**T**HE THUNDEROUS roar of a rising grouse sent adrenalin coursing through my veins. In one fluid motion I wheeled, mounted my gun and swung on the rapidly disappearing brown blur. As the 20-gauge cracked the bird slightly altered his course and the brunt of my charge of chilled 8s was expended on the trunk of an intervening locust tree. My second bid never quite caught up with the escaping partridge and I watched dejectedly as Ol' Ruff planed away unscathed, with Jack, my Brittany spaniel pup, in futile pursuit.

So went the first encounter with my quarry on a memorable hunt in one of my favorite Washington County grouse coverts. Only minutes before I'd left my car along a desolate road that threaded its way through some of the finest ruffed grouse territory in southwestern Pennsylvania. I'd trudged into a grapevine thicket through a four-inch January snow that had fallen a few hours before. It was nearly 10 a.m. and the early morning wind had abated somewhat. Although slightly overcast with temperatures in the low 20s, the weather was about as good as could be expected of a bleak mid-winter's day.

This was to be my final day afield in Pennsylvania's extended hunting season and there would be nothing like a brace of grouse to close it out. I'd maneuvered downhill through the dense cover, carrying my gun at low port arms with my dog quartering exuberantly some 40 yards ahead of me. I had acquired Jack some 5½ months prior to this as a two-month-old pup and was trying to turn him into an acceptable grouse dog. Aside from a tendency to range a bit too far on occasion, he was well on his way to becoming a creditable hunter. At 7½ months, while not yet holding point,

Jack was already showing a penchant for retrieving and was a tireless worker.

The dog had just approached a deadfall that lay downhill to my right when he began to make game. In less than a heartbeat the bird was in the air and as already described my proficiency with a scattergun left a lot to be desired. As I ejected the hulls from my Winchester Model 101 over/under, I mused at the innumerable other occasions when Thunderwings had humbled me similarly. No other game bird has afforded me the soul-satisfying experiences that the ruffed grouse has. The devotees of pheasant, quail and waterfowl hunting notwithstanding, I firmly believe the partridge is still the most challenging target the smoothbore aficionado can pursue.

## **Two Fresh Shells**

Closing the breech of my gun on two fresh shells, I moved on. Reaching the base of the hill, I surveyed the mouth of a smaller hollow which ran perpendicular to the one in which I stood. I planned to hunt the right side of this hollow to its head, then come back down the opposite side. Gingerly picking my way through the icy waters of a swollen brook that snaked through the larger hollow, I started to climb the right side of the smaller draw.

A blast from my whistle reminded Jack that he was a bit too far in front, and he responded by trotting a few yards downhill toward me. Halfway up the hillside I broke out of the woods and into an area that had been extensively timbered. Here was a place that promised good future grouse hunting! Having navigated part of the slashings, I stopped for a breather. While sitting on one of the stumps that dotted the landscape, I



reflected on the many unforgettable grouse hunts I'd had within a scant two-mile radius of this very covert. I also marveled at the fact that in two years of hunting in this area of the state, I'd yet to meet another hunter. It's a shame more people don't avail themselves of the tremendous sport to be had with this grandest of game birds.

### **Empty Game Pocket**

Jack's impatient gaze and my empty game pocket reminded me of the task at hand, and I struck out along the side hill about a hundred yards below the ridge which lay to my right. I progressed into a hawthorn thicket that was bordered on the uphill side by a pastured field. This border was punctuated by an occasional brush pile draped with grapevines. Here was a spot to gladden the heart of any dyed-in-the-wool grouser. My every move was geared to the anticipated flush as Jack cast hurriedly to and fro. However we failed to start a single bird.

Only days before I'd managed to fly several grouse from this covert, and now I looked well ahead across a narrow patch of green briars into a dense poison ivy thicket. Here and there a locust tree grappled with the writhing vines that still hung heavy with berries. This was the spot in which I'd found the birds on a wonderful occasion when eight got up at one time before the dog. Then, as now, the attraction had been the profusion of poison ivy berries and I fully expected several birds to be using this covert.

I cautioned Jack as he approached the hot spot, but the birds began to flush some 30 yards ahead of the dog. At least six distinct flushes were audible. Plunging into the thicket behind the dog, I could see him scurrying about, his little stub of a tail oscillating like a metronome. The snow-covered ground was literally a maze of fresh grouse tracks, each set ending with the gentle little arcs made in the

snow by the birds' primary wing feathers as they took flight. Before me a few hundred yards lay the head of the hollow where I figured to find the majority of the grouse. The cover wasn't particularly dense and I hoped it would offer some open shooting.

I'd just reached the last of the poison ivy when two birds flushed simultaneously well out of gun range. They certainly were skitterish! I was bemoaning my luck and wondering if I'd get another shot just as Jack launched a grouse ahead of me and slightly to my right. The bird's course took him low to the ground as he streaked for the hawthorns behind me. When he drew abreast of me some 20 yards uphill, he began to tower toward the treetops. I slapped the trigger and watched the bird plummet to the ground in a long, graceful arc, leaving a trail of feathers in the air to mark his passing. Before I could command him to "fetch," Jack was on the fallen bird. He eased the grouse into his mouth and trotted back to me with head held high. I was as proud as he as I admired the bird's beautiful plumage, then deposited it gently in my game pocket.

### **Another Shell**

After dropping another load into the lower barrel of my gun, I motioned Jack to resume his position ahead of me. Seventy-five yards farther on the cover gradually gave way to a rolling field. As I approached this edge I eyed a small grapevine suspiciously. From this very tangle three days before a bird had nearly beheaded me as he catapulted himself to safety. So taken by surprise, I had barely been able to get off a belated shot which naturally failed to intercept the partridge.

Even as these thoughts flashed through my mind, the grouse rocketed into view, mottled wings flailing the air as he sought to gain the sumac and dogwood trees back down the hollow. The shot was nearly identi-



cal to a low house station three target on the skeet field and, as I'd so often done with the claybird, I shot behind this target too. But I managed somehow to get a little in front with my second shot and was rewarded with a shower of tail feathers that glinted in the sunlight.

Despite the plumage loss the bird remained aloft, executing a number of showy aerial tactics as he maneuvered deftly among the standing timber. In a fraction of a second he was out of sight and I hastily reloaded to follow him up. Before I'd gone 75 yards I spotted the bird running a few steps on the ground in front of the dog. Once again he burst into flight. I fired and then dropped to one knee in order to better mark his flight through the screening cover. But I was unable to determine where he landed. When I'd seen him last he was speeding across an open field at treetop level some 200 yards distant. I retraced the bird's running tracks and found the place where he'd paused at the base of a dogwood tree. There on the snow was a lone crimson spot of blood. I'd done more than just defeather the grouse with my second shot!

I crossed the field and began to work out a narrow strip of cover that contained a few medium-size oak and locust trees with a smattering of wild grapes. Here and there lay a fallen log or a pile of brush, any one of which might harbor a wounded bird. My search in this area, thorough though it was, proved fruitless. Next I headed into a brushy draw that ran down into the hollow below me a hundred yards or so. I closely paralleled the draw while Jack searched through its center. We reached the

rivulet at the bottom of the hollow without finding the bird.

I didn't suppose he could have gone any farther, yet I wanted, at all costs, to avoid leaving a wounded bird unharvested. So the area downstream to my right was scoured exhaustively for fully half an hour. However, I was able to locate no sign of the bird. I had no choice but to give the grouse up for lost. Perhaps the bird had flushed wildly without my seeing it. Certainly it wouldn't have been the first time it'd ever happened. I'd satisfied myself that I'd done all I could in attempting to recover the bird. However, this was no true consolation and a feeling of despondency came over me as I turned to follow the watercourse upstream to the head of the hollow.

### **A Beautiful Sight**

I'd walked only a hundred yards or so when I realized that Jack wasn't in sight. Fearing he had wandered too far ahead of me, I paused long enough to sound two short blasts on my whistle. Before the staccatto trilling had ceased reverberating around the hollow, a movement on the high bank to my left caught my attention. I turned to witness one of the most beautiful sights I've ever seen. There came Jack downhill toward me, cradling a limp grouse in his mouth.

As I took the still-warm bird from him, I became so elated that I praised the dog for what seemed a solid 10 minutes. What an emotional upheaval! My day, yes my season, was now complete. I unloaded my gun and headed for the car with a priceless companion at my side and the weight of two partridges bumping satisfyingly against my back.

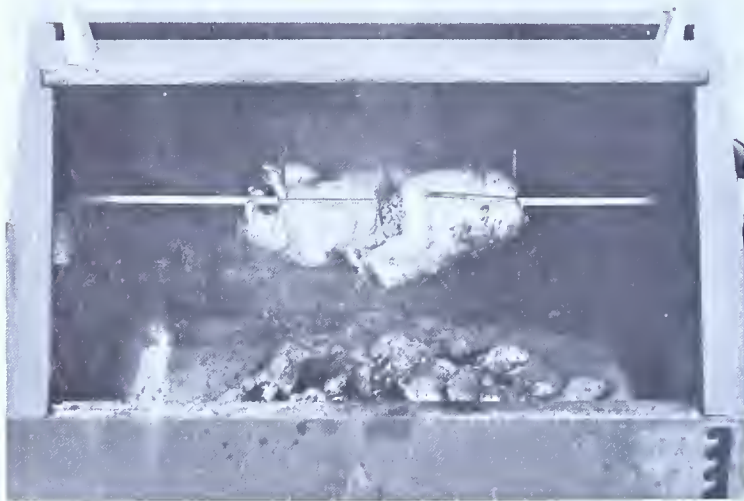
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### **But a Mouse Can't Fly**

The brown creeper is a sparrow-like bird which scurries up the trunk of a tree more like a mouse than a bird.

# GAME SMOKING

By Gene West



**S**MOKING is one of the oldest and still one of the most effective and tasty methods of preserving meat, fowl, and fish. For untold years man has practiced this ancient art, but now most of it is done commercially and the good old-fashioned family smokehouse is virtually a thing of the past. The age of modernization and mechanization has caught up with us, and that's a shame; smoking is every bit as effective a means of preserving meat as it was in past decades, and nothing else quite equals the taste of home smoked or home cured meat. Meat well smoked and dried will last indefinitely, and it makes a welcome and refreshing contrast to the table fare most of us enjoy today. While I greatly enjoy most wild game as it comes out of the freezer during the months following the hunting seasons, I have found that smoking adds far greater variety to game meat and is well worth the time required to do it.

Hickory is the most commonly used and popular wood for smoking, but for variety and a change of flavor, we also find apple and cherry wood excellent. In fact, it's now standard pro-

cedure when pruning fruit trees to save all this wood for the smoker. Willow, surprisingly, works very well, and some of the tastiest trout I've ever eaten were those smoked slowly over a smoldering green willow fire along the banks of a stream. Skinned, liberally sprinkled with salt, and smoked for several hours, they are indeed a delicacy. Sage, as will be discussed later, also imparts a special flavor to certain birds. Wood such as pine, cedar and spruce leave much to be desired and should not be used.

If the smoked flavor is all you're after, satisfactory results can be obtained with a hooded charcoal broiler and, preferably, a rotisserie or spit. Put the meat or fowl on the spit, with the charcoal set as low as possible for slow cooking. Keep the hood closed, and regularly toss well-soaked chips into the charcoal embers. Hickory is primarily used for this, but small amounts of sage add a delightful flavor to pheasant, grouse or chicken. Sage must be used sparingly. It is acrid when burned and, if used too generously, can spoil the flavor of the meat. Fish may be cooked whole, filleted, or

skinned and split lengthwise. Salted, laid on the grill and cooked slowly, as with birds, they make a delicious treat. Recently I took the last brace of last fall's ducks out of the freezer and thawed them slowly. They were seasoned inside with salt, pepper, and just a touch of sweet basil and put on the rotisserie. Finely chopped apple wood was regularly tossed into the coals, and as the skins of the birds started to dry, they were basted with butter. This went on for some four hours and the results were as tasty a pair of ducks as you'd ever hope to find.

Roasts may be smoke flavored in the same manner, and steaks or cutlets may be cooked this way on a grill. Best results are obtained with a charcoal broiler with a hood, as this holds the smoke in and helps it permeate the meat from all sides, making a more uniform flavor.

For actual smoking, the meat must—for best results—either be salted and aged or brined. Basically, salting encompasses mixing an equal amount of salt and sugar and rubbing it well into the meat. It is rubbed into all sides of meat, and the inside as well as the outside of fowl is well rubbed. After rubbing the salting solution into the meat, it should be wrapped in a damp towel and allowed to stand in a cool place for several hours, depending on size. Thinly cut strips of meat—up to one-half inch thick—require four to five hours aging, while birds such as pheasants or grouse require eight to 10 hours, and hams or large turkeys may well be aged for two or three days in this manner. Temperatures may vary, but I find that if the meat is placed in the refrigerator for this aging, it seems to work as well as anything.

Brining is a quicker process of preparing the meat for smoking. In some respects it is about equal to the slower salting and aging process, and in some cases, especially with older, tougher game, it is superior, for it seems to have a greater tenderizing

effect. With brining, it is also somewhat easier to use different spices, work them into the meat, and add distinctive flavors to it. Game may be either soaked in the cold brine solution for about one hour per pound of meat or, to speed up the process, bring the brine solution to a boil and boil the meat for five to 10 minutes per pound, depending upon the amount of the brine you want to penetrate and flavor the meat.

### Brine Solution

A good brine solution is one cup of sugar and two cups of salt per half gallon of water. To get a rather sweet, hamlike effect out of bear or wild boar, or even venison, two cups of brown sugar, two cups of salt, and a half gallon of water make a good mixture. Pepper, nutmeg, garlic, onions, or just about any flavor your taste desires, may be added to the brine to subtly blend the flavor through the meat. While the rubbing and aging process tends to tenderize the meat and break down the tissues, it seems to me that boiling in the brine solution does an even more effective job.

Whether you elect to salt or brine, the meat should be rinsed in cold water after this process. Allow it to dry for an hour or more—till it's actually dry on the outside—prior to starting the actual smoking operation.

The smokehouse of old is a thing of the past—with certain very rare exceptions—and most of us who smoke meat today must resort to different means. I've seen some home smokers made out of old refrigerators with the bottom, freezing unit, motor, and everything else removed, and several escape holes for the smoke drilled into the top. The refrigerator, thus stripped and modified, is elevated a foot or 18 inches above ground level, usually on a pile of dirt. A fire pit is built several feet from the elevated refrigerator. Its front and sides are partly open, the top covered. A stovepipe runs from the back of the semi-enclosed fire pit up to the bottom of the re-





**SMOKE EMERGING FROM top of unit indicates that everything is moving along well toward a game dinner.**

frigerator. This effectively draws the smoke from the fire, through the pipe, and into the old refrigerator, where it circulates and ultimately works its way out through the holes in the top.

The racks are left in the refrigerator to hold strips of meat such as jerky, and hooks may be installed for hanging birds, hams, or whole fish. Even a relatively small refrigerator will hold a considerable amount of meat.

For the average home smoker who is interested in working only with relatively small amounts of meat, a commercial smoker is the best answer. I use one made by Outers Laboratories and several similar ones are on the market. These smokers have hooks at the top and four grouse, pheasants, ducks, or similar size birds may be hung in it at once. A brace of geese, or even three if they're small, may be smoked at once, but one turkey is usually all that will fit in it at one time. A small hind quarter from a deer may be put in for smoking and curing into a tasty wild ham, and the ham from a small bear will also fit if it's well trimmed from the lower end.

These smokers have three removable grills which will hold a lot of steaks, chops, or jerky, as well as fish. A drip pan catches all the juices that work out of the meat, and at this point I'd like to stress the urgency of watching

this pan and keeping it emptied before it overflows and causes a foul-smelling mess.

Directly below this drip pan is a 400-watt heating element that runs off of regular 110V house current. A small pan, similar to a frying pan, is filled with chipped wood or sawdust. This smoulders over the heating element, causing a plentiful supply of smoke but no open flame. On the average, a pan of chips, be they hickory, apple, or other wood, will smoke for about an hour and a half.

Steaks, chops, and similar cuts of meat will be fully cooked in about four hours. A chicken or grouse takes eight to 12 hours, a turkey may require 18 or 20 hours. Hindquarters of deer, bear, or similar size game should be smoked for a minimum of 24 hours to fully cure them and impart the smoke flavor throughout.

Bear has a texture similar to pork and often is greasy, but if properly prepared, it's delicious. I cut it into steaks, trim away all excess fat, and then work a 50-50 mixture of salt and brown sugar into the meat. Let it sit for some six hours, rinse with cold water, and allow to dry. Then rub the meat well with brown sugar and lay the pieces on the grills in the smoker. After about eight hours of smoking it is delicious!

I know several hunters who never carry lunch, but instead put a few strips of smoked jerky into a pocket, fill a canteen, and take off. The jerky is tough and chewy, yet it is remarkable for sticking to your ribs and giving you the stamina to keep going all day. When smoked, venison is greatly reduced in size, and as you eat it, it tends to expand, so a far smaller amount than you'd anticipate will keep you satisfied and going strong.

Whether you use your smoked game as hunting fare, for a different meal-time treat for the family, or as something for your hunting buddies to munch on as you spend a winter evening reliving last fall's hunt, it's something you'll enjoy greatly. Give it a try!





# CONSERVATION NEWS



By Ted Godshall

## Trophy Deer and Bear Awards Made

**F**IVE PENNSYLVANIA hunters have been honored for the outstanding trophies they entered in the Game Commission's 1971 deer and bear measuring program.

Winners of sculptured, engraved bronze medallions and certificates were William M. Hoch of RD 1, Wapwallopen; Harry M. Reed of RD 2, Star Route, Cheswick; Lou J. Pearce of 306 Fifth Street, Elizabeth; Willis S. Kuhns of RD 3, Ligonier; and Arthur Stahli of Johnsonburg.

Hoch entered the largest typical white-tailed deer taken with gun, a buck taken in Luzerne County in 1943 and having antlers scoring 165 6/8 under the Boone and Crockett Club measuring system.

Reed's trophy was a non-typical white-tailed deer taken with gun, a buck bagged in 1933 in Elk County and having antlers which scored 171 6/8.

Pearce's award was for the largest typical white-tailed deer taken with bow and arrow, a buck bagged in 1969 in Westmoreland County having a rack scoring 145 5/8.

Kuhns entered a record non-typical white-tailed deer taken by bow and arrow, a trophy taken just last year in Westmoreland County and having a rack measuring 161 2/8. This marked the first time an award was given by



*PGC Photo by CIA Wes Bower*

**SCENE DURING MEASURING program in Southcentral Division, 1971.**

the Game Commission in its measuring program for a non-typical white-tail taken by an archer.

Stahli had the largest bear skull measured this year, a bruin taken in Elk County in 1967, measuring 20 11/16.

The awards were presented to the winners by Game Commission President E. J. Brooks at a banquet held in conjunction with the annual meeting of the Pennsylvania Outdoor Writers Association, at Hawley.

In all, 766 trophies were measured in the contest.

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### Something Significant Here

One egg from a species of the parasitic wasp divides to produce either 16 females or 24 males.



**HARRY M. REED**, Cheswick, Pa., with his beautiful Elk County trophy which scored 171-6/8 to make it the top non-typical buck measured in the 1971 program.

**BEST TYPICAL** buck taken by an archer was Lou Pearce's 145-5/8 trophy from Westmoreland County. Fred Servey, CIA of the Southwest Division, accepted award for Pearce, of Elizabeth, Pa.



**WHILE HIS WIF**  
Ligonier, displays  
ery trophy. It sco

**Game**

## Deer and Bo

**T**HE FOURTH Pe was held October pack, in conjunction vania Outdoor Write many outdoorsmen ar vation. Bronze medal were awarded for the and for the largest bo E. J. Brooks, Presiden







Willis S. Kuhns,  
the nontypical arch-

s 1971

## ards Awards

ards Awards Program  
near Lake Wallenpau-  
quet of the Pennsyl-  
It was attended by  
s interested in conser-  
created for the event,  
phies in four categories  
itations were made by  
Commission.

C Photos by Joe Osman

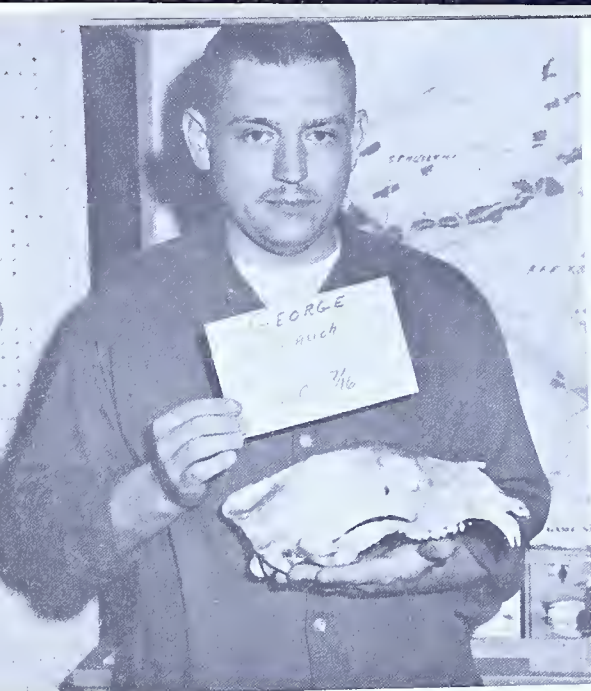


FIELD & STREAM editor Clare Conley,  
left above, main speaker at banquet, is  
shown with Don Lewis, new POWA presi-  
dent, and outgoing president Jim Bash-  
line. Below, best pick-up rack. The prop-  
erty of Ron Shovlin, Shamokin, it scores  
162-3/8.



ROY TREXLER, left,  
Chief of I&E, talks  
with Arthur Stahl,  
Johnsonburg, who  
bagged the biggest  
bear of program.  
Right, PGC President  
E. J. Brooks presents  
medallion to William  
Hoch, Wapwallopen,  
who took No. 1 typical  
buck.





**GEORGE WEYRAUCH**, Philadelphia, above, left, with his 2nd-place 20-7/16 bear. Right, **Tony Waidell**, Coaldale, and his 158-7/8 score trophy, which took 5th place in the typical category.

**MIKE HARTMAN**, left, Robesonia, took this 144-6/8 trophy in Lebanon County.

**PHOTO BELOW WAS** taken during measuring session in Southwest Division Office, Ligonier. Many outstanding trophies were scored during the 1971 scoring program.





# 1971 DEER RECORDS PROGRAM TYPICAL WHITE-TAILED DEER WITH GUN

Rank	Name	Address	County	Year of Kill	Score*
1	Hoch, William M.	RD 1, Wapwallopen, Pa.	Luzerne	1943	165-6
2	Stewart, W. Walter	218 Bunger St., Ligonier, Pa.	Westmoreland	1938	161-7
3	McCombie, Blaze	Nicktown, Pa.	Cambria	1968	161-5
4	Turenchalk, John, Jr.	Dixonville, Pa.	Indiana	1968	161-3
5	Waidell, Tony	146 Fisher Ave., Coaldale, Pa.	Schuylkill	1963	158-7
6	Dirslane, Thomas	RD 3, Troy, Pa.	Bradford	1968	157-2
7	Everly, Sherdel T.	RD 1, Garards Fort, Pa.	Greene	1961	155-6
8	Sutherland, Lester	821 Stewart Ave., Grove City, Pa.	Venango	1941	155-1
9	Rogerson, O. D.	420 Lindy Lane, Glendale, W. Va.	Greene	1965	154-2
10	Wolfhope, Elanore	Schellsburg, Pa.	Bedford	1940	154-1
11	Fisher, Delbert	RD 2, Palmerton, Pa.	Schuylkill	1941	153-7
12	Zurick, Richard	RD 1, Ligonier, Pa.	Westmoreland	1968	153-4
13	Schibner, George	1038 State Ave., Coraopolis, Pa.	Allegheny	1970	153-3
14	Jones, Harold	RD 1, White Haven, Pa.	Carbon	1905	153-2
15	Sheldon, Harold	RD 2, Thompson, Pa.	Susquehanna	1944	151-7
16	Borger, Wesley A. H.	RD 2, Kunkletown, Pa.	Monroe	1929	151-4
17	Moore, Robert	RD 4, Dallas, Pa.	Bradford	1955	150-5
18	Arnold, Thomas	Honesdale, Pa.	Tioga	1948	150-2
19	Heaton, Warren M.	RD 1, Snowshoe, Pa.	Centre	1918	149-7
20	Pascarella, George J.	109 Archibald Ct., Bradford, Pa.	McKean	1968	149-5
21	Ream, William J., Jr.	RD 1, Elverson, Pa.	Chester	1969	149-4
22	Agostoni, Edward	RD 1, Eighty-Four, Pa.	Washington	1969	149-3
23	Gathany, Max	Great Bend, Pa.	Susquehanna	1958	149-0
24	Mima, Gilbert W.	2801 Kansas Ave., McKeesport, Pa.	Somerset	1969	148-7
25	Yezioro, Thomas	Box 41, Keisterville, Pa.	Fayette	1969	148-6
26	Shaw, Edward	Bigler, Pa.	Clearfield	1938	147-7
27	Koller, James I.	150 Rose Lane, Indianapolis, Ind.	Allegheny	1970	147-4
28	Cassel, Calvin	RD 2, Duncannon, Pa.	Perry	1970	146-5
28	Elliott, Edwin	RD 1, Natrona Heights, Pa.	Allegheny	1969	146-5
29	Russell, Edward	109 Mann Ave., Mill Hall, Pa.	Clinton	1969	146-3
30	Sopko, Nick (Dew Drop Inn)	Richmondale, Pa.	Lackawanna	1969	146-2
31	Bumbarger, Clair	400 Adams St., Philipsburg, Pa.	Clearfield	1966	145-6
31	Fledderman, Arthur	563 Wolfel Ave., St. Marys, Pa.	Elk	1969	145-6

\* Deer scoring by the Boone and Crockett method is in one-eighth inch units, thus the score of the No. 1 head here, for instance, is 165-6/8.

Rank	Name	Address	County	Year of Kill	Score
32	Enders, Dallas	RD, Huntingdon, Pa.	Huntingdon	1938	145-1
33	Hartman, Michael A.	RD 1, Robesonia, Pa.	Lebanon	1969	144-6
33	Stasik, Walter R.	5176 Campbells Run Rd., Pittsburgh, Pa.	Beaver	1970	144-6
34	Hunt, Elmer	Lake Como, Pa.	Wayne	1942	144-2
35	Woodmansee, Wendell	Lake Como, Pa.	Wayne	1944	144-1
36	Aulbach, Wayne	RD 3, Coraopolis, Pa.	Beaver	1970	144-0
37	Kahle, Wayne N.	RD 1, Clarion, Pa.	Clarion	1969	143-5
37	Myers, V. C.	RD 2, Greensburg, Pa.	Westmoreland	1927	143-5
38	Bowman, Mary L.	RD 2, Mill Hall, Pa.	Clinton	1945	143-4
38	McDowell, John T.	RD 3, Blairsville, Pa.	Warren	1937	143-4
39	Rollinson, Thomas	South Kill Ridge Rd., Sharon, Pa.	Mercer		143-1
39	Sprau, Howard R.	152 Mt. Airy Rd., Shavertown, Pa.	Luzerne	1969	143-1
40	Carey, Joseph L.	Pennsdale, Pa.	Lycorning	1970	142-7
41	Dhanenes, Lee	RD 3, Linesville, Pa.	Crawford	1969	142-6
42	Laslo, Alex	693 Railroad St., Windber, Pa.	Somerset	1932	142-1
43	Armstrong, Kenneth A.	RD 5, Chambersburg, Pa.	Bedford	1955	142-0
43	Kistler, Harvey	RD 2, Lehighton, Pa.	Carbon	1951	142-0
43	Viscuso, Charles E.	RD 2, Finleyville, Pa.	Beaver	1970	142-0
44	Bedillion, James R.	Hickory, Pa.	Washington	1967	141-7
44	Dugan, Robert E.	RD 1, Conemaugh, Pa.	Forest	1969	141-7
44	Kelleher, Louis O.	RD 1, Conneautville, Pa.	Crawford	1969	141-7
45	Katrencik, Rudolph A.	Hendersonville, Pa.	Washington	1967	141-2
46	Liberati, Daniel	523 Terrace Dr., Pittsburgh, Pa.	Allegheny	1970	141-1
46	Mace, Steve	Fleetwood, Pa.	Berks	1969	141-1
47	Pryce, J. Douglas	340 N. Washington St., Montoursville, Pa.	Clinton	1921	140-6
48	Austin, James R.	RD 2, Conneautville, Pa.	Crawford	1966	140-3
48	Hielman, Andrew	Smethport, Pa.	McKean	1940	140-3

## NON-TYPICAL WHITE-TAILED DEER WITH GUN

1	Reed, Harry M.	RD 2, Star Route, Cheswick, Pa.	Elk	1933	171-6
2	Seip, Robert A.	RD 1, Saylorsburg, Pa.	Monroe	1944	166-0
3	Diehl, Mrs. Frances	4631 Main St., Egypt, White Hall, Pa.	Lehigh	1966	162-5
4	Fye, Blanchard	Moshannon, Pa.	Centre	1932	154-7
5	Kennell, Gerald	RD 1, Hyndman, Pa.	Somerset	1946	148-2
6	Morris, Fred	1951 Fry Ave., Williamsport, Pa.	Lycorning	1965	148-0
7	Messner, Fred	1520 E. 3rd St., Williamsport, Pa.	Tioga	1940	145-1



Rank	Name	Address	County	Year of Kill	Score
1	Pearce, Lou J.	306 5th St., Elizabeth, Pa.	Westmoreland	1969	145-5
2	Blauch, Robert C.	312 Wilkin St., Lebanon, Pa.	Schuylkill	1968	139-0
3	Shafer, Harry J.	920 Schiller St., Baden, Pa.	Warren	1968	137-3
4	Kirschner, Robert C.	925 Coulter Rd., McKeesport, Pa.	Westmoreland	1970	131-6
5	Martichaak, Robert	Church Hill, Dunbar, Pa.	Fayette	1966	127-4
6	Smith, Gregory E.	2261 Baltimore Pike Rd., York, Pa.	York	1969	127-2
7	Manspeaker, Edward L.	RD 2, Apollo, Pa.	Westmoreland	1969	123-1
8	Lemme, Joseph	Pocono Summit, Pa.	Monroe	1969	121-1

### WHITE-TAILED DEER WITH BOW AND ARROW (NON-TYPICAL)

1	Kuhns, Willis S.	RD 3, Ligonier, Pa.	Westmoreland	1970	161-2
1	Shovlin, Ronald	1039 Water St., Shamokin, Pa.	Northumberland	1935	162-3
2	IWLA (Franklin Chapter)	Franklin, Pa.	McKean		158-7

### WHITE-TAILED DEER PICK-UP

### BLACK BEAR WITH GUN

1	Stahli, Arthur	Johnsonburg, Pa.	Elk	1967	20	11/16
2	Weyrauch, George	6333 Cardiff St., Philadelphia, Pa.	Pike	1969	20	7/16
2	Bathurst, Harry	Blanchard, Pa.	Clinton	1968	20	7/16
3	Horn, Doyle L.	RD 2, Cogan Station, Pa.	Lycoming	1967	20	6/16
4	McMillan, G. C.	RD 4, Tyrone, Pa.	Pike	1969	20	3/16
5	Corbin, Martin	Canadensis, Pa.	Monroe	1969	20	1/16
6	Jayne, Roger	RD 1, Laceyville, Pa.	Wyoming	1969	19	14/16
7	Tomolovski, Harry, Jr.	2012 Henderson St., Bethlehem, Pa.	Pike	1969	19	11/16
7	Ernest Swanger	Lebanon, Pa.		19	11/16	
8	Owner—Pa. Game Comm.					
8	Gionni, Otto	316 Belonda St., Pittsburgh, Pa.	Elk	1969	19	8/16
9	Beitel, John	RD 1, Drums, Pa.	Luzerne	1969	19	2/16
10	Craig, Robert	RD 1, Milan, Pa.	Bradford	1967	18	14/16
11	Becker, Arthur O.	RD 2, Mt. Joy, Pa.	Potter	1969	18	10/16
12	Craig, Robert	RD 1, Milan, Pa.	Bradford	1969	16	1/16

### BLACK BEAR (PICK-UP)

Rank	Name	Address	County	Kill	Year of	Score
1	Nolf, Robert	Conyngham, Pa.	Luzerne	1970	20	12/16

\* Bear skulls are scored by taking the length and width in one-sixteenth inch units and adding these measurements.

*We Told Our Friends We Were Going to Get a Big Bear, but We Were Only Kidding. Then, Right in Front of Me, I Saw the Monster That Was to Be the . . .*

## ***Biggest Bear in the 1971 Program***

**By Arthur Stahli**

**"I**T'S A BEAR," Tom yelled. "There he goes!"

I had seen him at the same time, as he ran across the old logging road ahead of us. We hurried down to the place where the bear disappeared—we had glimpsed him for only a second—and tried to catch sight of him somewhere in the woods beyond. But we were unsuccessful at that. For a moment we may have thought he didn't exist at all, that we had been dreaming or something, but the fresh tracks in the snow—they looked like awfully big ones to me, though I sure wasn't an expert on bears of any kind—proved he was for real.

It was late afternoon on November 21, 1967, a Tuesday and the second day of the Pennsylvania bear season. My hunting buddy, Tom Stelene, and I had got out of school at 3:30 and ridden a trail bike to the Powers Run region of Elk County. "We're gonna get us a bear," we told some friends. "A big one." We were only joking, of course.

Now, looking at those steaming hot tracks in the snow, I wasn't so sure it was all a joke. The more I looked, the bigger they seemed to get. For a little bit I wondered what had happened to the hunter we'd met on the logging road awhile earlier. He'd said he hadn't seen a thing, not even a track, and was quitting for the afternoon. I bet he wouldn't have quit if he'd known how close the bear was that made these footprints in the snow.

"Let's follow them," someone said—I'm not really sure if it was Tom or me. Regardless, that certainly seemed the thing to do, and we took off after them. We followed the tracks down-

hill, across a stream and over the main road. Where they went up a hill on the other side, Tom and I split up. He followed the trail straight up the hill, while I circled around the left side, watching ahead. After awhile I saw a sort of ravine that seemed like the ideal place for the bear to come down if he was going to, and I posted myself where I could watch a good distance ahead and waited. I thought Tom might catch up to the bear, but I didn't hear any shooting.

### **A Cracking of Branches**

Suddenly I did hear something—not shooting, but what sounded like the cracking of tree branches. Then I saw the bear! He was coming right at me, only a short distance away, and he saw me at the same time. I think we were both stunned for a moment. The bear made his move first, swinging around and starting to run away. I raised my 32 Special, aimed quickly and fired. Nothing happened. I didn't understand how I could have missed, but he kept right on going. I levered another shell into the Winchester, carefully aimed and shot again. He was hit, I was sure he was hit, but he was still running!

"Did you get him?" I heard Tom call from a long ways off.

I yelled that maybe I had only grazed him, that he was still running. Tom hollered that I should wait for him to catch up to me before following the trail again, and in a little bit he came puffing up. I showed him where the bear had lost some blood in the snow, and Tom said he thought it had been hit mighty hard.

We waited awhile, then started



tracking the bear again. We crossed another hill without catching sight of him, but we went on trailing. The tracks went through a lot of thick mountain laurel, down the far side of the hill, and across a set of railroad tracks and a creek. We didn't want to wade the creek, so had to walk a long ways to the Baltimore & Ohio bridge to cross it. By the time we got back to the trail, there wasn't much light left and we were pretty far from our trail bike. We soon had to give up the search for the day.

When Tom and I got back to my home, we told my dad what had happened. He was excited at our luck, and the next morning before daylight the three of us were back at the place we'd abandoned the trail the day before. I stayed on the trail while Dad and Tom spread out on each side. We all kept in sight of each other as we moved ahead.

The tracks seemed awfully fresh—I could even see claw marks in them—and I tried to motion to the others that he seemed to be only a little distance away. Then, just a short ways ahead, I saw the bear lying under a spruce tree. As I took a couple of slow steps toward him, he got up, but this time I didn't let him even have time to turn. When my 32 Special cracked, he fell in his tracks.

My shouts brought Dad and Tom running. "I got him," I yelled.

"You sure did!" Dad said. "Man, he's a whopper."

For a little bit we just looked at the animal. It was hard to believe I'd really bagged him. Then we tried to slide him out from under the spruce. We could hardly budge him, he was so big.

"We'll have to have help," Dad said, and after talking it over we decided I'd stay with my bear and they'd go for some other men.

They didn't get back until 1:30—about five hours after they'd left me. There were about eight men with them. I asked what took them so long



**ARTHUR STAHLI, right, Johnsonburg, was only 16 when he bagged his 20-11/16 trophy bruin.**

and they said it had been hard to convince anyone how big the bear was.

One of the men was my uncle, and he had driven his tractor as close as he could get it. With all of us pulling and lifting, we managed to drag the bear to the tractor and eventually got it back to Johnsonburg. On the truck scales at the Pentech Paper Company, it weighed 460 pounds, with the entrails removed. A photographer from the Johnsonburg *Press* took a picture and then we hung it up in our front yard. A lot of hunters and other people stopped to see it. At that time I didn't know anything about the Game Commission's records program, but luckily the bear's skull wasn't damaged and when it was measured in 1971 it scored 20-11/16, which put it into fourth place in Pennsylvania's all-time records and the No. 1 spot in this program. I figured that was pretty good for a 16-year-old hunter.

# New Program Begun to Keep Land Open

The Pennsylvania Game Commission and private industry have joined hands to launch a pilot project designed to make or keep more privately-owned land available for public hunting. The project, called the Forest Wildlife Cooperative Program, will be similar to the Game Commission's Farm Game Cooperative Program, which has opened to sport hunting nearly two million acres of private agricultural land.

Under the Forest Wildlife Program, the Game Commission will provide an additional degree of protection to large forested tracts. In return, owners will make the properties available to sportsmen. Certain roads into or across the tracts will be closed to public usage and posted with Game Commission signs. The responsibility for enforcement of regulations governing the posted roads will rest with the Game Commission.

In the past, some inconsiderate hunters abused the privilege of using these roads, creating deep ruts in bad weather, thereby making them impassable, and otherwise damaging the property. Owners had to repair the damage at their own expense.

Indiscriminate snowmobile operators would gain entry to private property, usually through such roads, and then speed along on the snow, damaging young seedlings and knocking the bark off trees.

Littering became a problem almost impossible to control, with owners forced to spend large sums of money to clean up the trash, garbage and debris left by irresponsible visitors.

Additional damage was registered by owners of trail bikes, motor scooters, all-terrain vehicles, mini-bikes, motorcycles, etc.

Many property owners, although they would have preferred to keep their land open to sportsmen, were forced to post their tracts against all trespassing in order to protect themselves. Or, to offset damages, taxes, and increasing costs of providing free recreational uses, some were forced to lease hunting rights on their lands to private groups or individuals, thereby closing the area to public usage.

Owners of large tracts, sometimes maligned as profit-seeking polluters inconsiderate of public needs, have for some time sought relief from often-overlooked depredations while attempting to meet public demands for more "open space," and the cooperative program grew out of a mutually recognized need for protection, combined with multiple land use concepts.

It is hoped that this new pilot project will improve sportsmen-landowner relationships in many forested areas of the state, particularly in the northern tier counties, as the Farm Game Cooperative Program has done in the agricultural sections of the Commonwealth.

Only large, forested tracts will be included in the pilot project. The minimum size area involved will be at least 1,000 acres.

Already, nearly a half million acres have been enrolled in the pilot project under holdings of the following co-operators: Texas Gulf Sulphur Co., Hammermill Paper Co., Collins Pine Co., United Natural Gas and the Sylva Corp.

Eventually, if successful, the program could result in perhaps a million acres of land available for public hunting — land that otherwise might have been closed to the sportsman.

**Give**

**GAME NEWS**

***To a Friend . . .***





**JIM STARNER, 14, left, and his brother Steve, 12, of RD 3, Dillsburg, with the six geese they bagged last October 6. They saw them come in the night before, planned their hunt, and with their parents close by made their stalk and dropped their limits. They were so excited they retrieved the geese from the pond without a boat!**

## Hunting License Sales Show Increase for 1970-71

Pennsylvania, which sells more hunting licenses than any other state in the nation, again showed an increase in the number of sportsmen afield during the license year ending August 31, 1971.

Hunting license sales for the 1970-71 year totaled 1,182,860, an increase of 31,053 over the preceding year. However, the jump noted a year ago was 33,235 and the increase the year before last was 57,574, so the rate of gain has been slowing down.

All-time records in all categories of license sales were established during the past year. Resident license sales totaled 1,080,002, an increase of 30,375 over the preceding year, when the old record was established. The 1970-71 resident license sale was the third time the figure topped the million mark. Included in the resident license sales figure were 157,098 junior licenses sold to youths 16 years of age and under. The old record for this category was 155,838, set in 1968-69.

Also included in the resident figure were 1264 free licenses issued to disabled war veterans and 16,550 free licenses to full-time servicemen on active duty.

Nonresidents purchased a record 102,858 licenses during the 1970-71 year, just edging the old mark of 102,180 that was established during the 1969-70 year. With a 60 percent hike in the cost of a nonresident license going into effect just prior to placing the 1971-72 licenses on sale, it is almost certain that last year's nonresident record figure will stand up for some time. The nonresident total last year included 147 alien licenses.

Leading counties in the sale of resident licenses for the past year were Allegheny, 80,919; Westmoreland, 43,597; Lancaster, 39,072; York, 36,637; and Montgomery, 30,298. Leading counties in the sale of nonresident licenses were: Mercer, 6887; York, 4662; Pike, 4235; McKean, 3903; and Erie 3581.

## Snowmobile Use on Game Lands Restricted

**T**HE Pennsylvania Game Commission has established new restrictions on the use of snowmobiles on State Game Lands. In the future, snowmobiles may be driven on State Game Lands from January 15 through April 15 of the same year only during specified hours and only on designated and marked areas, roads or trails.

Several years ago very liberal regulations were established which permitted use of snowmobiles on Game Lands during the winter. This was before the snowmobiling sport mushroomed and conflicts developed between the vehicles and wildlife.

Snowmobile operators, by and large, have shown respect for property and

wildlife, but some took advantage of the former liberal regulations and abused their privileges. Wildlife populations were constantly harassed and chased. Waste disposal became quite a problem. For example, in one area used exclusively by snowmobilers last winter, the landscape was relatively "clean" before the onset of winter. This spring, a Game Commission officer hauled two ¾-ton truck loads of trash from the area.

Now, the Game Commission finds that controls are needed to protect State Game Lands and the wildlife thereon, and has acted to confine snowmobiles to areas where conflicts with wildlife will be minimal.

## Vehicles Illegal for Chasing Game

Pennsylvanians are reminded that it is illegal to pursue game with vehicles. As snowmobiles, all-terrain vehicles, trail bikes, jeep-type equipment, etc., gain in popularity, so does the temptation to chase wildlife, particularly deer. A number of offenders faced prosecution last winter for following game in vehicles.

Wildlife has enough trouble making it through a hard winter without having to flee from man-made machines capable of negotiating deep snows at high speeds. As winter wears on, wild animals often use up all reserve strength and energy just to survive, and some fail to make it even at that. If some of this strength must be used to flee vehicles, chances for survival diminish.

Under the Game Law, it is illegal to hunt for or pursue or to follow or chase game of any kind with any vehicle. Violators are subject to a stiff penalty.

## Furs in State Bring \$477,220

Pennsylvania furs bought by state's dealers brought a total of \$477,220.02 during the 1970-71 season. The figures represent only Pennsylvania-caught furs bought by licensed raw fur dealers. Furs shipped or transported out of state by trappers or held for their own use are not included in the tabulation.

The 310,331 muskrat pelts made up the largest item in the state's fur market last year, bringing trappers a total of \$335,133.42. Making up the next largest category were 40,941 raccoons, sold for \$64,378.92. Trappers sold 2528 beavers for \$33,566.45 and 4637 red foxes for \$19,571.90. The 3378 minks sold by trappers brought \$13,913.50, while 3101 gray foxes were purchased by dealers for \$7,347.45. Included in other sales of pelts were 6,200 opossums, \$2,674.22; 933 skunks, \$497.15; and 396 weasels, which brought \$137.





# FIELD NOTES



## Bear With a Bellyache

**SNYDER COUNTY**—I was called to a farm east of Milroy, Mifflin County, on a complaint of an injured black bear. Deputy Dean Stuck and I arrived shortly thereafter and examined the bear, but could find no injury of any kind. The bear appeared very sick. We contacted the Cooperative Wildlife Research Unit at Penn State and the following day the bear was removed from the field in which it was lying and taken there for diagnosis and treatment. Several days later it was reported that the bear was improving and that it probably would survive but may suffer permanent brain damage. Enterotoxemia, commonly known as "overeater's disease," is believed to be the problem. It is likely that she picked up some toxic substances, ate too much, and her intestines produced too many poisonous bacteria. This can be just as deadly as taking poison directly.—District Game Protector J. P. Shook, McClure.

## A Little Bird Told Him

**LEBANON COUNTY**—Ben Maurer, a Food and Cover Corps member, informed me that he knew of a successful archer who bagged a nice doe on the first day of the season. I had been informed of this, but I asked him how he knew about it. He said a pigeon told him. He went on to explain that one of his homing pigeons came back with a message in a capsule, sent by a friend, who saw the deer. The friend lives about 15 miles from him and is also a homing pigeon fancier.—District Game Protector P. A. Hilbert, Cleona.

## Okay, Okay . . .

**MERCER COUNTY**—My wife says that if one of my Field Notes isn't soon printed in **GAME NEWS** she is going to cancel our subscription.—District Game Protector B. K. Ray, Sheakleyville.



## Can't Win Nohow

**UNION COUNTY**—Recently a man from this area decided to do a little duck hunting. Choosing a 20-acre man-made body of water, he settled there early in the morning. Soon after daylight three mallards flew over his position and he brought one down. Unfortunately, it fell into the water about 30 feet from shore. There being no current, he had to wait for the wind to drive the drake to shore. Every few minutes he would peer over the bank of the dam to see if his mallard was coming within reach. It was getting closer. Then he heard a loud splash and saw his duck disappear under the water. It was the last he saw of it. He returned home rather discouraged, wondering if a turtle or a scuba diver got his mallard.—District Game Protector J. S. Shuler, Lewisburg.

## One Thing or Another

**MONTOUR COUNTY**—Comments received at the Bloomsburg Fair: "How about you fellows stocking a few blacksnakes on my place?" "The Game Commission should establish a sterilization program to keep the deer herd in balance." (Followed by quite a discussion.) "I know you guys don't have anything to do with the issuing of 'doe' licenses, BUT. . . ." "How many udders does a doe deer have?" And just when we are about to end another long day at the fair, a firm handshake and "You're doing a fine job," from the Governor of Pennsylvania, Milton Shapp.—District Game Protector R. W. Donahoe, Danville.



## And a Prayer?

**MONTGOMERY COUNTY**—Chick Phillippi, one of my deputies, recently answered a complaint concerning raccoons raiding garbage cans at a local church. After many unsuccessful attempts at trapping the culprit using conventional bait, Chick received a call stating that the raccoon had been caught. After picking up the trapped animal, Chick asked the "trapper" (a nun) just what she had used for bait, since she had been successful where he had failed. Her reply—strawberry shortcake.—District Game Protector B. J. Schmader, Collegeville.

## The Wrong Way

**MONTGOMERY COUNTY** — We recently had an example of how not to teach a youngster to hunt. On the opening day of the general small game season, Deputies W. Williams and C. Williams stopped a car in which they found a father and his 12-year-old son. They were in possession of three pheasants. When asked if he had taken any of the pheasants, the lad answered, no. The boy kept insisting that he had not shot anything, and his father kept insisting that he had shot one of the pheasants. The father asked for a hearing and by this time convinced his son that he should testify that he had shot one of the pheasants. I wonder if the father realizes what the consequences of this action could mean? First he violates the law, then makes a reluctant son give false testimony under oath. The lad may get the idea that breaking laws doesn't mean anything, and if you are caught a little lie will clear you.—District Game Protector H. T. Nolf, Telford.

## Something New?

**VENANGO COUNTY** — During a recent radio program, the M.C. told me he had some loaded questions. He really stopped me when he asked, "How many cottontail deer were hit along the highways in Venango County this year?" — District Game Protector L. E. Yocum, Oil City.

## Fringe Benefit

**SULLIVAN COUNTY**—The unseasonably warm weather in October prolonged the migration of geese through Sullivan County, and most of the waterfowl hunters reporting continued action on the larger ponds.—District Game Protector D. J. Adams, Eagles Merc.





### Doesn't Seem Fair

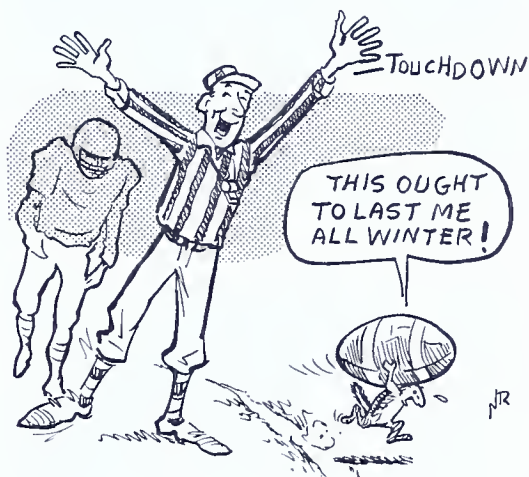
**FOREST COUNTY**—On the first day of turkey season, I checked a man from Ohio who had an empty game bag but said he was very happy. He told me that for several years he had never failed to see turkeys during both archery season and the rifle season for deer, but had never seen one while hunting turkey. On opening day of turkey season, he sat under a large hemlock for over two hours. Finally he saw a black squirrel. He took a shot at the squirrel and missed, and when he shot a turkey flew out of the tree he was sitting under. He was using a single-barrel gun and never got a shot at the turkey. — District Game Protector E. L. Taylor, Tionesta.

### Surprise

**LANCASTER COUNTY**—Deputy Lou Gable approached a youngster on the opening day of small game season. A bulge was noted in the boy's game pouch, but he denied having anything. When questioned about the bulge, out came a pair of wool long johns! It seemed the 80-degree weather became too much, so when no pheasants or rabbits were looking, off came the long johns.—District Game Protector R. E. Gosnell, Millersville.

### Well . . . It's This Way

**TIOGA COUNTY**—On investigating a complaint recently, I was faced with the usual list of grievances which all Game Protectors hear sooner or later: What happened to the rabbits, why aren't there any squirrels and grouse, what is the Game Commission doing about the deer herd, why don't we have any pheasants up here, what are you doing with all the turkeys? I tried to answer all of these questions and explain the Commission's programs, but the last question left me in despair when he asked, "And just what is the Game Commission going to do about the economy?"—District Game Protector J. K. Weaver, Mansfield.



### Roar, Chipmunk, Roar . . .

**CENTRE COUNTY**—A tiny chipmunk took some of the play away from Penn State's football victory over Texas Christian on Saturday, October 23. The cavorting rodent near the south goal line kept those in view of his action in stitches. Once the game had to be held up to permit him to scamper away. Even an official got into the spirit of the occasion by signaling a touchdown as the chipmunk crossed the goal line.—District Game Protector J. L. Wiker, Pennsylvania Furnace.

### Web-Footed?

**DAUPHIN COUNTY**—I received a call from a resident in Millersburg who said she had several weird creatures in her window well. She said they were black, six inches long, web-footed and sounded like kittens. After a thorough investigation, these mysterious, black, web-footed critters turned out to be—kittens! — District Game Protector G. W. Packard, Millersburg.

### He's One Old Fellow

**PERRY COUNTY**—The first day of archery season Russell Herr, Jr., of Newport, picked up a turtle in Perry Valley that had the date May 31, 1879, carved on its underside. Mr. Herr and I think it was an Eastern box turtle. The life expectancy of this type of turtle reportedly is about 80 years, which would make this one a senior citizen.—District Game Protector L. L. Everett, Newport.



### And What Were Your Answers?

**ALLEGHENY COUNTY**—Two interesting questions this month: "Can you hunt deer with a spear?" and "How much is the bounty on a praying mantis?"—District Game Protector R. B. Belding, Baden.

### Nonresident Success

While checking hunters on the first day of general small game season, I had the good fortune of running into a very happy nonresident hunter. In the archery season he had harvested an 8-point buck and when I checked him on this day he had just taken a hen turkey. I told him he was only one away from our Triple Trophy. He also stated to me that Pennsylvania had the best hunting in the U. S. A. He said that if the nonresident license went as high as \$140 he would buy one.—Land Manager W. A. McGinness, Claysville.

### Tries 'Em All

**BEDFORD COUNTY**—While on patrol during the early part of duck season, I had occasion to inspect a real sports car. Sitting along the river was one of those little "bugs." This I assumed, would be a duck hunter's auto. Inside, as I recall, were a football, a tennis racket, and a baseball and glove. Outside was a minnow bucket and on the side window was a sticker advertising a drag strip. Now there's a "sports" car.—District Game Protector T. C. Barney, Everett.

### Another First for Hunter Safety

**SNYDER COUNTY**—At a hunter safety course in Milroy there were 23 students present, seven parents, and one dog. The pooch came with some of the students and stayed the duration of the course. Dogs which are first-time hunters are not required to take the course, but if anyone sees a dog wearing a fluorescent orange vest or hat and chasing rabbits next season, chances are he's the one who received his hunter safety training. — District Game Protector J. P. Shook, McClure.



## Anyone Interested? Let Us Know

This summer I have been asked quite a few times about the beautiful cover pictures on the *GAME NEWS*. The people I talked to would like to see the Game Commission reprint some of the better cover pictures for framing at a nominal fee. An idea to check into. — Land Manager D. E. Jones, Somerset.

## Praise for D.U.

**CRAWFORD COUNTY**—On October 27 it was my pleasure to attend the Ducks Unlimited dinner at Pittsburgh. It is gratifying to see a group of sportsmen who really are interested in the future of waterfowl and the sport of hunting. Large amounts of money are collected by this group for the purchase of wetlands in the Canadian provinces to be set aside for nesting grounds for waterfowl. It is just such endeavors that may make it possible for future generations to know what waterfowl looks like.—District Game Protector L. V. Haines, Linesville.

## Leave 'Em Alone

**LEBANON COUNTY** — In mid-October the State Police at Jonestown reported that a young couple had delivered a spike buck to the barracks and it was still alive. Arriving there with some deputies, we learned the deer had run into the couple's car and was knocked unconscious. Pitying it, they tied its hoofs together, put the deer on the back seat and drove about four miles to the police barracks. Before the couple left I advised them of their danger with this deer in the car with only a cloth tied around the hoofs.—District Game Protector P. A. Hilbert, Cleona.

## Perry County Report

**PERRY COUNTY** — Some unusual events that occurred in this county in October: 1. A bald eagle was sighted along the Juniata River on October 17. 2. John King, New Bloomfield, shot a squirrel that was white except for a small amount of gray on the stomach. 3. A black bear was seen in Sugar Run on two different days. Deputy David Wertz measured a paw print—10 inches x 5½ inches.—District Game Protector L. Everett, Newport.



## Enough's Enough!

**LYCOMING COUNTY**—While on patrol I stopped by a hunting camp. A member whose home is near Philadelphia was there and he told me he came up from the city to relax and get away from the noise. He was watching some deer out the cabin window when a rattlesnake crawled out from under the couch he was sitting on. He shot the snake and, in doing so, shot a hole in the floor. In order to calm his nerves he decided to take a walk along the stream. There he came across two more rattlesnakes. He said that was enough for him, he was going back to the city where he could relax.—District Game Protector P. A. Ranck, Williamsport.

**Don't Just Sit by the Fire . . .**

# **Do Something This Winter!**

**By Les Rountree**



**Y**OU MAY OR may not like it, but winter has in fact arrived. For many campers it's a time for contemplating last year's outings and planning next summer's adventures. For others it's simply a continuation of outdoor fun with one exception . . . it's colder. With the great outdoor clothing available today there's no good reason why more campers, hikers and other outdoor inclined people have to spend so much time indoors.

There is a lot to be said for sitting beside a flickering fireplace and reading this issue of **GAME NEWS**, but my guess is that you'll enjoy it more if you've spent a pleasant day or half day in the snow. A warm fire and a cup of hot cocoa become very important when your cheeks have been prickled with a good helping of brisk winter air.

A combination camping and skiing trip is one of the pleasant winter diversions offered to Pennsylvanians in many locations. There are state and privately operated ski areas in all four quarters of our state and no one is more than 50 miles from one. Even in the extreme southern counties man-made snow machines supplement nature's efforts, and while it isn't just the same as skiing on the genuine white stuff, it can be just as invigorating. Several camping areas close to ski slopes are open all year and I'm sure many more will be open in another year or so. The motor home, pick-up camper and travel trailer are ideally suited to the ski and camp routine and in addition to being fun, it's an economical way to take the whole family. What you'll save on motel accommodations can buy some very fancy ski gear. If you haven't skied before and you want to take a trial fling at it, ski rental shops in most of the larger cities and practically all ski areas have all you need. Until you discover what your preferences in equipment are, I'd recommend that you rent equipment. Be careful though . . . skiing can become habit forming and you just may leave the fireplace for good. Contrary to popular notion, one can learn



to ski at any age. The beginner simply doesn't attack the more hazardous slopes until he has mastered the fundamentals. Get some instruction first. The few dollars it will cost are well worth it.

Plain old-fashioned tobogganing is a lot of fun too, if you have a group to do it with. Pulling the sled back up the hill is the toughest part and the extra people come in handy for taking turns at it. The great fun of racing downhill on a toboggan is that you never know just where you will end up! Steering one is an impossibility and about the best thing you can do if you discover you're on a bad route is to upset. Of course, you'll do this many times without trying.

### Sleds and Super Sleds

Ordinary steel runner sleds are fun too, but a good packed surface is needed to bring out the speed and maneuverability that provides the thrills. A couple of new products from Wooster Ltd. in Wooster, Ohio 44691, are the slickest things that I've seen since the hula hoop. One is called the SPV—Super Performance Vehicle. In spite of the Madison Avenue lingo, this is just the ticket to take along on a winter camping trip, since it will easily move down any slope and go like the dickens on a steep one. The more powdery the snow, the better, and no special packing is needed. The sled (and I guess it can be called one) is molded from two pieces of polyethylene bonded together like the hull of a boat. Air trapped between these two layers makes a shock absorber for a smooth and comfortable ride. With four narrow tracks underneath, the SPV really flies! The thing

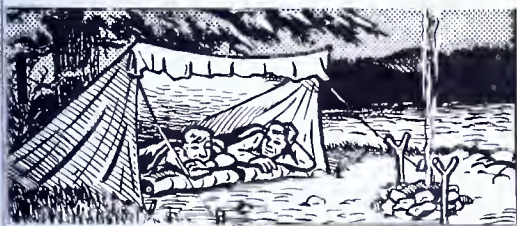


**ORDINARY SLEDS ARE** fine for winter fun, but this SPV—Super Performance Vehicle—is even more exciting, Rountree believes.

is a one-man (or boy, or girl) job that weighs only 11 pounds and measures 24 by 42 inches. Sorry I didn't find out about this one in time for my Christmas column. The SPV has two steel rudder controls so you can direct it and alter speed in case you oldsters chicken out. Sells for \$24.95.

The other product for winter fun that this company is offering is a Sno-Bob. This bicycle on skis is not a completely new idea. I can remember seeing homemade ones 30 years ago. They worked too. This more modern design is made from tubular steel and features a mini bike seat and chrome-plated handlebars. Easily stowed in the camper or in the trunk of the car for winter camping, the Sno-Bob sells for \$39.95. Don't get the idea that these things are just for the kids. My bet is that many of you older kids will want to try it too. An upset in the snow is much softer than falling on bare ground.

Maybe I'm a glutton for punishment but my favorite winter exercise is snowshoeing. One can paddle around on three or four inches of white stuff but when a really good snowfall occurs, up to 18 inches or better, that's when the sticks and thongs are really





**SKIING HAS ALWAYS** been a favorite winter sport, and cold weather camping outfits make it even more enjoyable nowadays.

needed to make back-country walking fun. I know of no other way to approach game so easily for photographic purposes. All birds and mammals must think that human beings are indoors after a heavy snow and they just don't seem to expect anyone will be out slogging around. Your walk in the woods can consist of a half-mile round trip around the neighborhood park or an extended hike into a remote part of our beautiful state. The distance you travel is not important. A small woodlot takes on the imaginary characteristics of the frozen Yukon when a soft blanket of snow covers the familiar landmarks. As you silently mush along (if you have an ounce of romance in your heart) you are automatically transported, at least spiritually, into the company of Jack London, Sgt. Preston and James Oliver Curwood. A bit childish perhaps, but I honestly feel that way about snowshoeing. It's almost a religious experience, no not almost, it is a religious experience for me.

Several months back I talked about the lightweight plastic snowshoes that are on the market today. I still like the

plastic jobs for short family trips but for the serious beginner I recommend the bearpaw design that the United States Army is partial to. They are short and wide and comparatively easy to negotiate in brush and broken terrain. They are not a fast shoe like the Pickerel or Chippewa styles, but much better on very deep fluffy snow. The Pickerel is a long narrow shoe that is made for high speed traveling on wet or heavily crusted snow. The tail end of the shoe is easy to get tangled up in, especially when you want to make an about-face. As your skill in snowshoeing increases, you may want to invest in several types of shoes for different kinds of snow, but your first pair should be bearpaws picked up at an army surplus store. These will cost anywhere from \$10 to \$20 complete with foot harness.

#### For First Try

For your first try at snowshoeing take a short trip of about a quarter mile to get the feel of the shoe. Walking with snowshoes requires a wide-stanced, shuffling gait that utilizes muscles you probably didn't know you had. An hour's mushing is about all the novice should attempt the first time out, but after a bit of conditioning a four- or five-mile hike can be managed with ease. Wear clothing that can be opened up as body heat begins to build up and then zipped up again if you stop to rest or look around. Becoming overheated can be more uncomfortable in cold weather than during the summer months. Unless you allow the generated heat to escape from the folds of clothing, chilled perspiration can start a terrible case of the shakes.

For all sorts of winter activities I favor the half-cotton, half-wool two-piece long johns. They are easier to get in and out of and don't bind at the waist like the old one-piece jobs do. A wool blend shirt and a down jacket takes care of the upper part. For pants I prefer a hard finished whipcord or



other closely woven fabric. Insulated or down filled underwear is okay for less active outdoor activities, but if you intend to be moving around a lot it's too warm.

On my feet I like leather for snowshoeing, with a flexible eight-inch boot being just about right. The ankle must be able to bend easily for turns and about-faces, and stiff ski-type boots will not work. For walking trails and on packed snow when the maximum depth might be six inches, the combination leather and rubber pacs are ideal. All rubber is okay if your feet are not inclined to perspire excessively. Mine do, so I try to stick with well greased leather foot gear for my outdoor activities.

Incidentally, all leather shoes that are worn frequently by campers, hunters, trappers and outdoor workers will last twice as long if greased and cleaned regularly. It may be the mark of a true outdoorsman to have a well-worn pair of boots, but they don't have to be dirty and they shouldn't be bleached dry. Stuff newspapers inside to dry them, and before the next outside trip give them a liberal dose of boot grease. There are several good products on the market for this job. Bean's has made a fine one for many years and the Snopruf brand is also a good formula. A new product made here in Pennsylvania does the job with distinction. It's called Old Lumberjack and is made by Sportspal, Inc., in Emlenton. Strange thing about all of these products is that they usually suggest on the label that the boots be warmed and the grease melted before an application. I've tried this and darned if I can figure out why. I get a better water resistant coating if I rub on the grease right out of the can and forget it. The leather should be cleaned with a damp cloth first to avoid rubbing mud and dirt into the grain. No grease will waterproof leather 100 percent but it will make it more water resistant. And soft, pliable boots are much more comfortable

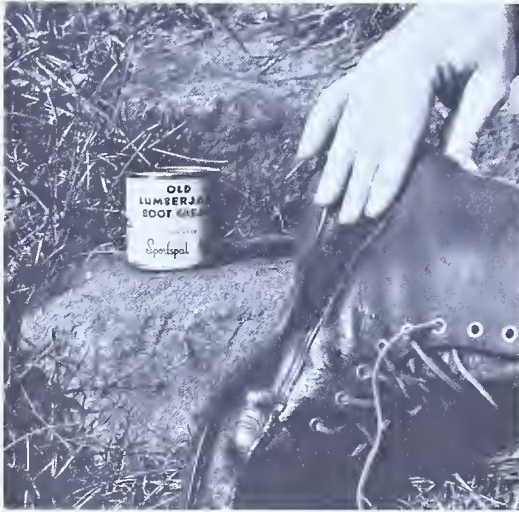
to put on than board-stiff, dried-out ones, of course.

In addition to skiing, snowshoeing, sledding and the more active winter games, studying animal tracks can be a fascinating winter pursuit. Except along river bottoms and after a rain, it's difficult for the amateur or professional tracker to follow a creature's trail at many times of the year. In the winter, it is all there to see. Following a single animal during the winter is a great vest pocket course in natural history. Take a gray fox, for example. Follow his progress as he pokes his way around snow-covered hummocks looking for field mice. He sniffs and stalks about like a house cat looking for his dinner. Whoops, what's this! Here he made a pounce on something and the disturbance in the snow indicates that he almost caught it! A little farther on, another scuffle in the snow and a telltale spot of blood that spelled the end of a mouse or other small creature. And here is the place where a great horned owl made a dive on some unsuspecting prey. The wing prints are clearly visible on the fresh snow.

It's surprising to many that, with few exceptions, most of our four-



**THE SNO-BOB**, sort of a bicycle on skis, is another fun rig for snowy slopes, kids, moms and dads and anyone else who likes winter.



**ANYONE WHO SPENDS** much time outdoors in winter knows that wet feet are a problem. Frequent greasing of leather boots helps.

footed creatures and a good number of birds do not hole up indefinitely or go south for the winter. When a storm is too bad, they stay under cover like we humans do, but on bright moonlit nights and sunny winter days they are out and around looking for food and

adventure. Come to think of it, that's why we get outside on winter days too. We don't have to catch our own food, at least not very much of it, but we certainly are out for adventure. Being an incurable eater I just have to bring food into this discussion of winter fun. I like to eat at all times but for some reason food never tastes better than that eaten after a day in the snow. Winter camping and hiking are great for the appetite.

Also in the food category, I want to thank all of you GAME NEWS readers who responded to my request for game recipes. I received some really good ones that have been tried on my family. I'm always happy to hear about your favorite game cooking method. At some time in the not too far distant future I intend to put a short outdoor cookbook between two covers that will include many of the ideas sent in by readers. (P.S. Just got a new dutch oven. Anxious to try some of Ted Trueblood's great Dutch oven extravaganzas. I'll give you a report in a month or so.)

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## Book Review . . .

### New Loading Manual From Sierra Bullets

For many years, Sierra bullets have been favorites of countless handloaders, known for their handsome appearance as well as their outstanding accuracy. Now this manufacturer has produced an excellent manual, giving tested loads in all rifle and handgun calibers for which Sierra bullets are suited, from the 22 Hornet through the 7.7mm Japanese and the 9mm Luger through the 45 Long Colt. In addition there is much other data to interest shooters who roll their own—for instance, proper reloading methods, conversion tables, an informative article on exterior ballistics, and extensive tables which give all pertinent data on each Sierra bullet at all reasonable velocities—energy, drop, mid-range trajectory, remaining velocity at all normal ranges, etc. A highly useful manual for all handloaders. (*Sierra Bullets Reloading Manual* by Bob Hayden, Martin J. Hull, T. G. Almgren and Bill McDonald, Sierra Bullets, 10532 South Painter Avenue, Sante Fe Springs, Calif. 90670. 350 pp., loose-leaf ring binder, 1971. \$4.85.)





**AFTER RAY ROGERS, CENTER, WON 1969 National and he lost 2nd place to Ed Eliason, left, despite identical score, Johnny Williams still finds it easy to grin—an attitude that helped him reach the top.**

***Pennsylvania's Great Archer, Johnny Williams . . .***

## Tops in His Teens

**Keith C. Schuyler**

*Photos From the Author*

**I**T IS A pleasant monotony to keep reporting proof that Pennsylvania continues to be the numerical center of interest in bow hunting as well as target activity for the nation. But there is nothing ever monotonous in the fact that the Keystone State keeps turning out champions. Now we have the best.

Today, Johnny Williams, formerly of Cranesville, Pa., and more currently of the United States Army, stands comfortably at the top of archery's amateur world by virtue of his win at York, England, in July of 1971. In doing so, he bested a field of 177 archers from

33 nations to come up with three new world's records for events used to tabulate the total score. He set a new double FITA total of 2445, a 90-meter score of 550 and a 50-meter tally of 626.

The grin that carried this young man from archery adolescence to the world championship at the age of 17 belies the grim determination evident in his record. Much of what Johnny is on the target line is a personal thing which carries beyond archery alone. His answers and opinions on archery are as brief and pointed as the arrows that have stitched his name forever on



**ASKED WHAT HE** thought about between shots, World Champion John Williams said: "The next arrow . . . nothing can be done about the last one."

the scoreboard of the greats in the sport.

Whatever mechanism coordinates the mind and muscles of young Williams into a nearly perfect shooting machine does not show through the relaxed attitude that is just as much a part of him between tournaments. Despite the sacrifice of personal time and the dedication necessary for his accomplishments, off the line he is just likable, good-looking, pleasant, relaxed Johnny Williams.

When asked about his associations with girls, his answer was as unassuming as his personal attitude toward his shooting: "Well, I like to talk to them; and now they're starting to talk back to me."

Those who have watched Williams on the line have shared my wonderment as to what goes through his mind as he stands in contemplative mood between releases when each arrow means so much. I asked him what he thinks about as he stands on the threshold of another hard-fought

win or desperate defeat.

"The next arrow," was John's reply. "I can do nothing about the last one, so I put everything I have into the next one."

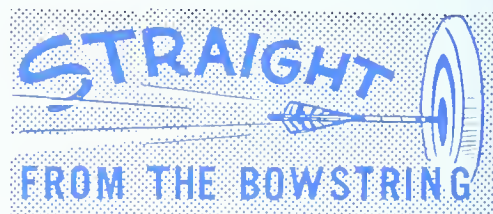
Possibly the best clue as to how Johnny Williams became World Champion in England in 1971 is in the manner in which he can take defeat. This writer had occasional glimpses of this young man as he moved up through bitter disappointment and near misses at the big titles until he hit 1971 and proved himself for all time. Today he is the undisputed top free-style bow in the entire world. This, in itself, is a remarkable achievement for anybody. But, it becomes even more noteworthy when it is considered that John just turned 18 years of age on September 12, 1971.

### What It Takes

Those who wish to challenge either his scores or his accomplishments may be discouraged by a look at what it takes to make a champion. It took seven years for Williams to make the top spot although there were favorable indications when he was but 10 years of age. It was then that his father, Edward Williams, took John out in the backyard to start him on the career that has sent him to the top.

John comes from a shooting family. His dad is a fine archer in his own right, and Marilyn Williams, his mother, does right well too. She was all-events ladies' Pennsylvania free-style champion a few years ago. Both Ed and Marilyn shoot in the top class in their respective divisions. The entire family shoots free style.

In some ways, a review of the archery history of the champion parallels





that of some other youngsters who came on strong in the early years. Possibly the big difference has been in the way that John accepted defeat or built on accomplishment. It was not always easy, although the pattern of progress was consistent enough to portend great things for him in even the early years. Although he adapted some of the recent refinements in archery tackle to his abilities, he clung to the conventional use of fingers on the string.

### First Formal Competition

Shortly after John Williams began to shoot the bow, he entered his first formal competition at State College at the tender age of 10. He placed seventh among the cadet boys, with a total of 1627. The next year he entered his first national tournament at Purdue University, where he moved up to second place among the cadet boys, posting a 2260 in the Junior Columbia Round. He won the cadet boys' clout with a 290 at that tournament.

He came back the same year to State College where he asserted himself by placing first among the cadet boys with a 2240 in the Junior Columbia Round. Again, he won the cadet boys' clout. He went on to Seven Springs in that same year, 1965, where he came up with a second among the cub boys with a 269 field, 267 hunter, and a 300 animal round.

John shot as a junior in 1966, when he was 12, and placed second in the State Target Tournament with a Junior American Round of 2795. Again, he went on to the State Field Tournament at Seven Springs to pick up a second among junior boys. His scores are indicative of his progress, since he posted a 398 field, 399 hunter and a 385 animal round.

Thirteen years old. The unlucky number held no terror for young Williams as he won the Junior Boys' Championship at the National Target Tournament at Greene, N. Y. He had a total of 3055 for the Junior Ameri-

can Round. In amassing this score, he set a new national record at 40 yards with 266 and tied the record for the 30-yard score with 270. Then, back to State College where he won the Pennsylvania Junior Boys' Championship



**JOHNNY DISCUSSES ARCHERY** with Doreen Wilbur, Iowa, after she shot her second runner-up position for world championship in England.

with a Junior American Round of 3032. He set a new record for the single and double American Round in his class and won the junior clout at 120 yards with 306. At Seven Springs he placed second in the State Field Tournament's Youth Division. He had a 483 field, 481 hunter, and a 462 animal round. To top this off, John shot a 6-point buck on the first day of the Pennsylvania archery season.

At this point, having reached the ripe old age of 14 in 1968, he was tempted by the challenge of shooting against the men's division at the regular distances. He was really winning too easily among youngsters his age. "I got more of a thrill out of it by just coming close when shooting against the men," he said, "than when I would win in the youth division." He did more than come close, as subsequent events proved.

At Rutgers University he won the Eastern Archery Tournament with



**JOHNNY WILLIAMS** discusses exhibition shoot at Forksville with his father, the person the young archer credits with much of his success.

1119 FITA and a new record of 1015 for the York Round. He had a 748 for the first American Round and set a new record of 770 in the second American. He also smashed existing records in the double American team shoot when he came up with an 816. And he set new highs in the York 100-yards with a 459, a 60-yard York record of 202, a 60-yard American of 252, and a 40-yard American of 266. He went down to Talequah, Okla., to place fifth in the National Archery Tournament with a 1099 FITA, a 760 American and an 810 in the 900 Round.

On top of this, he set a new FITA record of 1187 at the State Target Tournament at State College. He broke three other records while winning the tournament. His new high for the 900 was 828, for the American, 784, and for the clout, 314. At the Field Tournament he settled for fourth place with a 496 field, a 517 hunter and a 516 animal round. He placed well in the National Mail Tournament with 300 round scores averaging 292. At the Ben Pearson Shoot, he placed eighth.

Came 1969. John was now 15 years of age. He started out the year by

setting a new Chicago Round record of 858 in the State Team Championship at Altoona, Pa. He was second in the National Mail Tournament with 300 round scores of 298, 295, 299, 291 and 297. At the Erie City Tournament he shot his first perfect 300 round. He was second that year at the American Indoor Archery Championship at Cobo Hall, with a 295-298, and in the team score, 299. At the Brown County Tournament he won first place and broke all records.

### World Records

That was the year for the United States Archery Tryouts at St. Louis. John was there. He placed No. 1 on the U. S. team with a new record FITA of 1242. His second FITA was 1170. He also set three other world records shooting a 320 at 70 meters, 315 at 50 meters and a double FITA of 2412. He asserted himself at Rutgers University in the Eastern Archery Tournament with a first place. He recorded a 1156 FITA, a 1017 York and a 1552 double-American for a total of 3725.

At the 25th World Championship Tournament held at Valley Forge, Pa., in 1969, John came in second, only three points behind Texan Hardy Ward. His FITA scores were 1205 and 1215 for a total of 2420. At the National Tournament which followed, he came in third, losing on the number of hits when his total tally matched that of Edwin Eliason, second-place winner. He went on to the Ambassador Cup at Montreal where he placed second with FITA scores of 1232, 1187 and 1224. Then, although he missed the Pennsylvania State Target Shoot while at Montreal, he came back and won the State Field Tournament at Seven Springs with a 508 field, a 539 hunter and a 522 animal round.

It is obvious from the tournaments John attended that his mother and father stood firmly behind their son's ambitions. Either Ed or Marilyn, or both, accompanied him on most of his near and distant forays to test his



abilities against the best. Their faith had already been well rewarded, but 1970 was coming up with frustrations and a hint that perhaps young John was fading. Or perhaps the competition was improving faster than he could keep pace. At least that's how it looked for awhile.

Having reached 16, John entered the First National Indoor Tournament at Harrisburg, where he had a disappointing fourth of 838. This was certainly not to be his year. He was fifth at Crittenden, Ky., and sixth in the National Target Tournament at Oxford, Ohio. In the State Target Tournament at Penn State, he was in sixth place.

Then came 1971. With hooks still legal, Johnny went up against them at the Second National Indoor Tournament at Harrisburg, Pa. He placed first with an 852, using the conventional finger release. Later he received an invitation to Moscow. Russia was rough. He placed 13th with FITA scores of 1141 and 1111, well beneath his ability. But, at the team tryouts for the United States Archery Team, held at St. Louis, he placed No. 1 on the U. S. team with FITA scores of 1194 and 1213. At the Eastern Archery Championship at Rutgers, he came in third.

### The Big One

Then came the big one. John went to the World Championship at York, England, and he became the best anywhere. His double FITA of 1219 and 1226 was the best ever recorded. As icing on the cake, he came back and further proved his ability by winning the National Archery Association championship at Oxford with a 1199, FITA; an 828/900; and a 794, American. At the 40-yard distance, he had a *perfect score*.

John was invited to the Bowhunters' Festival at Forksville, Pa., in September of this past year, where he shared exhibition honors with Doreen Wilbur, of Iowa, who was No. 2 lady at



**RELAXING BEFORE** exhibition at Bowhunters Festival, Johnny displays one of his favorite bows. Stabilizers are used by all target archers.

the World Championship event at York.

That is what it takes.

Johnny attributes his success largely to the teaching of his father, who has coached him through the years. At all times when I have seen him shoot he was handling a Hoyt bow. His current bow is 69 inches, which gives him close to 45 pounds at his draw of over 30 inches. He nocks his arrow  $\frac{3}{8}$  inch above the rest with a brace height of  $9\frac{3}{4}$  inches. His bow has a standard grip. He uses a solid pressure point in conjunction with a Pierson non-adjustable rest. He last was shooting a DJ sight with a Hoyt clicker. His standard double stabilizers are 10 inches in length, of one pound each. He uses a regular tab for his fingers.

His aluminum arrows are 20-16s with a shooting length of  $30\frac{1}{4}$  inches. He is currently using XX75s. John

does not use weighted points. His arrows have the standard three-fletch plastic with a very slight spiral, and mid-nocks fit the arrow to the string.

When at home, John practices a couple of hours a day two or three days a week. Mostly he shoots at the longer distances, 70 and 90 meters, and at 50 meters occasionally. He will release from 70 to 80 arrows at a practice.

In the winter he had been shooting indoors at an old neighborhood dance hall that has been set up as a range.

The big challenge to John as he improved in skill was to move up with the men. Shooting with the men drew on his total reserves just to come close to the top. He liked the competition and dug in to maintain his position.

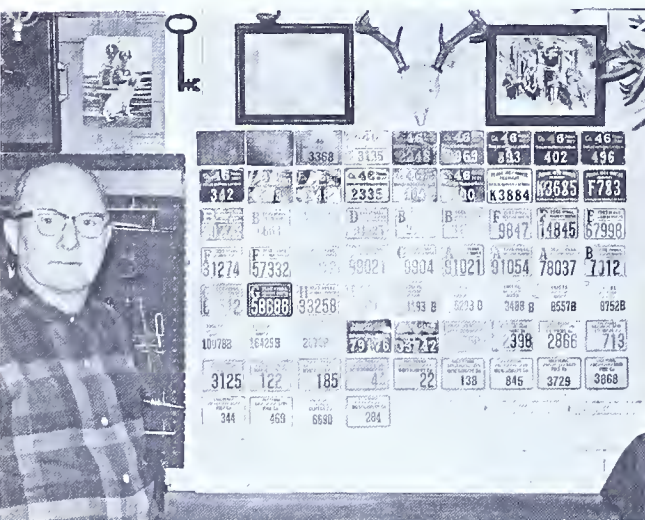
Despite his first deer kill at age 13, John has had the same problems in hunting that seem to be an embar-

assing affliction of target champions. Through a reliable grapevine it was learned that the champ missed six deer in 1970.

Although John has always shot plastic vanes, he doesn't shoot any special brand. All of his arrows are personally cut and assembled from raw shafts.

John is in the same position as his American predecessor, Hardy Ward, of Texas, who won the world championship in 1969. Ward is currently serving with the United States Army and was last stationed in Virginia. Although he is a member of the Armed Forces, Hardy gets to most of the big archery tournaments.

All of his friends, which include his closest competitors, will be hoping to see Johnny at the big ones. But wherever he goes, the 1971 World's Champion archer will always belong to Pennsylvania.



**EUGENE S. RILEY**, a retired electrician from North Hills, Pa., is shown above with his personal collection of Pennsylvania hunting licenses. Mr. Riley began his hunting career in 1919 and intended to keep all his licenses, but some were lost through the years. Also shown are most of his antlerless deer licenses. Mr. Riley has taken one bear, in Lycoming County in 1935, and numerous deer.



**REPRESENTATIVE George W. "Heap" Alexander**, Clarion, photographed this deer in Clarion County after it was reported to him by Walter Love. The deer apparently came to the tree while snow was deep, stood up and poked her head into the opening, perhaps looking for acorns, and was caught when her hind feet broke through the crust. She could not free herself and died.





**THE EXTENDED SEASON ON COTTONTAILS** is fun for hunters and dogs, but can be rough on gunstocks. Refinishing can be a pleasant winter chore.

## WINTERTIME PROJECT

**By Don Lewis**

*Photos by Helen Lewis*

**"I** KNOW YOU'RE going to give me the normal answer, but I'll ask the question just the same," the man on the phone said. "But first, I'll give you a little background on why I'm asking. You see, I'm done up with a broken leg that'll keep me in a wheelchair for a few weeks, and I thought I might touch up a couple of my guns for a wintertime project, and I just wanted to see how you felt about me doing the work."

"I certainly can't see anything wrong with doing it yourself, and I'm not quite sure what you meant about my giving a normal answer," I said.

"Well, I figured you'd say take it to a stockmaker and have the job done right. That's the normal answer I expected."

"Sometimes I don't give the normal answers," I answered, laughing. "I will tell you that if you want a first

grade job, or if you have a very fine stock with a lot of beautiful grain in it, you should seek the services of a competent stock man. But as far as doing it yourself, if you use care and common sense, there's no reason why you can't end up with a nice looking job."

"One gun is an old 12-gauge Stevens pump that was given to my father by his father, and it's worn white from being carried so much. The blueing is nearly gone and the stock is scarred and chipped from the hard hunting this old gun has seen. I certainly want to do the old shotgun justice, and I intend to have the action and barrel blued and possibly a new stock and slide handle installed. This way the gun will really look like something special. The other gun is a Remington 591 5mm Magnum. It's not old, but it slid halfway down a mountain-



**FIRST STEP IN refinishing stock is removing what's left of the old finish. A small knife with the blade held almost vertically works well if care is used.**

side last turkey season, putting some deep scratches in the wood. I just want to refinish its stock."

"I told you all my answers were not normal, and I'm afraid I'll have to disagree with you on the Stevens pump. If the gun has seen the use you claim it has for more than 50 years, leave it as it is. The scratches and scars along with the white places where the blueing is gone are vivid reminders of the hundreds of hunts this old shotgun took part in. How many hundred times was the old pump carried by its receiver or tucked under someone's arm to wear all the blueing off? Can't you see that the scars, chips and scratches are marks of the shotgun's history and enhance the old gun instead of detracting from it, as would be the case with a newer shotgun? If I had a hunting gun that had seen the use the Stevens has, I wouldn't touch it. To make it shiny and new would really cheapen it and take away the distinct look of a faithful shotgun. Leaving it as it is would be doing it justice in my eyes."

"By gollies, I think you have something there. I guess I never looked at it in that light, but I sure can see what you mean. You didn't give me the answers I expected, but I'm glad I

called. You kept me from ruining a fine old pump shotgun that tells a story everytime it's looked at."

We talked for several more minutes about old guns and how important it is to keep all guns in good shape. When we were getting ready to hang up, he asked me again about the 591 Remington and how he should go about doing the job himself.

"My advice would be to buy one of the commercial finishing kits that's available in any gun store and follow the directions carefully. I will point out that refinishing a stock by a novice means only the outside surface. Don't attempt to alter any of the inletting. The rifle has already been fitted in the stock."

"Should I remove all the old finish or just try to touch up the bad spots?"

"I doubt very much if you could just touch up the scratches and scars. Your best bet would be to remove all the finish by scraping or using a fairly coarse sandpaper. Use a lot of care in sanding out the deep scratches to keep from making a depression in the stock. When most of the scratches are gone, switch to a finer sandpaper."

"I don't want to appear completely dumb about this, but what do you mean by coarse and fine sandpaper? I work with computers and am not much of a handyman."

"That's nothing to be ashamed of," I answered. "Start with number 80 sandpaper and sand with the grain—not across the stock. When the rough sanding is finished, use a number 240 sandpaper and again go with the grain. To get a satin smooth finish, run a damp cloth over the stock and the grain will rise. Hold the stock immediately over a moderate heat until





completely dry and then sand with a number 400 sandpaper. To get top results, this last operation may have to be repeated three or four times. When satisfied that the stock is smooth, apply a stock filler such as waterproof varnish. Don't use linseed oil. Varnish will not stick to linseed. Allow the filler to dry for a couple of days and then sand again with number 400 sandpaper. After this operation, apply a stock finish and let the stock stand for four or five days. Repeat this operation several times."

"Gee, I thought that finishing a stock was a couple of days' work. The way you describe it, I'll have to wait a week between coats of stock finisher."

"That's exactly right. Patience is a must for any type of gunwork, whether it be finishing a stock or drilling a hole in the receiver. Take plenty of time, go easy with the sanding and don't remove any more wood than necessary."

"What about an oil finish?" he asked.

"Use something like Lin-Speed after the sanding operation and follow the directions closely. Remember, it's not so much what you use as how you use it. The sanding is really the heart of a fine stock finishing job."

### Some Questions

I suppose I get these same questions in one form or another tossed at me 10 to 20 times a year. I'm aware that most fellows expect me to always suggest the services of a gunsmith or a stockmaker. This is not always the case. Sometimes, the services of one of these gentlemen should be used to preserve the beauty and worth of very fine guns, but there are plenty of other times where the owner will save a few dollars and get some satisfaction out of doing the job himself. The average gunstock on most factory produced guns does not present a touchy problem when it comes to finishing the outside. As I explained to the man on the phone, it's patience that counts. The willingness to take every bit of

time needed to get the job done to the very best of the man's ability.

To give a shining example of how not to do things, I once explained to a caller how to relieve the wood on the side of a rather old Model 340



**AFTER DEWHISKERING** stock by wetting and quickly drying, filler is applied to stock to make an even surface and then numerous coats of finisher are added.

Savage so a Weaver side mount could be installed for scope mounting. I was careful to emphasize two or three times how extreme care should be exercised so that too much wood isn't removed. The man apparently did not listen or else had no conception of what I was talking about. He took a hacksaw and made one whale of a cut into the side of the stock. I will admit that the chunk of wood he removed left plenty of room for the side mount. In fact, I believe there was ample room for two mounts. We worked for over an hour getting the thing smoothed out. He was unconcerned about his mistake. I guess appearances meant little to him.

Today, many hunters want to convert or build a rifle. I'm often asked about converting some military rifle to a more popular caliber. There are times when this should be done and can be done to the shooter's advantage, but in most cases it is an unwise move, especially if the converter has



**A FINISH LIKE THIS** is within the capabilities of a careful home workman, and the completed job is something he can take pride in.

to pay for all the material and labor involved.

Converting to another caliber is not as simple as it may sound. Some may think the old military barrel is just screwed out and a new barrel screwed in. This is actually what takes place, but there are complexities involved that the average hunter or shooter would not be aware of. Getting a barrel out of a receiver without marring the action is no easy job if the right tools aren't used. Installing a new barrel requires a lathe, headspacing gauges and plenty of knowledge on how to use both. I realize the object is to make a deadlier outfit, but unless the man doing the work knows how, the outfit might be deadlier than expected. It could let go from stem to stern, taking part or all of the shooter with it. Without some genuine knowledge of headspacing, actions, and pressure, converting can be a dangerous thing.

The first thing that should be considered is the action. Not all military actions are suitable for today's high pressure cartridges. Actions that were designed to handle pressures in the 35,000-pound category could fail quickly when subjected to common

pressures today that run beyond 50,000 pounds per square inch.

Cost has to be a prime consideration. As far as I'm concerned, the conversion cost for the average hunter is usually excessive and with questionable benefits. It often would be a much better decision to purchase a new rifle. To convert a fine 8mm to a 270 or even a Magnum does not guarantee the owner that he's getting a better rifle. For average Pennsylvania big game hunting, the 8mm is adequate in every respect. The excuse that ammo is hard to find might have been a worthy one years back, but it's not valid today. Unless there is clear-cut proof of benefits by converting, I would go for another rifle.

When it comes to building a new rifle, there should be a definite purpose for this rifle to fill that can't be found in a factory produced job, unless the purchaser just wants something radically different from what the gun companies offer. The same thing that holds true for converting a rifle in regards to workmanship and know-how is true when it comes to putting all the components together in a new rifle. It's not a simple "do-it-yourself" kit, and the cost will normally be double that of a factory produced rifle if good components are used.

### **Something Lacking**

Most of the homemade rifles I've seen lacked something in the building. If the metal work was good, the woodwork was not up to par. In cases where several specialists were used in putting together a rifle, the end product was tops, but the owner seldom wanted to admit the price he paid. From my point of view, there would have to be a definite need for me to invest heavily in a custom rifle that had little or nothing to offer that can't be found in today's factory product. I'm speaking from a performance standpoint and not looks or special design. The rifle available today will certainly do more than most shooters



are capable of, and there is little hope that the custom job will outperform the fine Remingtons, Rugers, Winchester, Weatherbys, Savages, Sakos and a few more that have beauty, accuracy and dependability.

I'm not against converting or building if there is a real gain by doing it. I'm just trying to point out some factors that don't always receive consideration until it's too late. I can easily understand any shooter or hunter wanting a rifle built to his design and dimensions, but there is no point in having it done if the new owner expects his masterpiece to outperform in every respect the rifle that comes from the assembly lines.

The man who needs special stockwork, the varmint hunter who knows to the last detail what he wants in a varmint rifle, and other special cases are the sort I'm talking about. A friend of mine put well over \$500 in a special rifle that hasn't yet come up to his expectations. He enjoys shooting my Ruger No. 1 heavy barrel 22-250 which cost less than half his creation.

There are some wintertime projects besides refinishing a stock that I can think of. One is installing a new trigger. So many rifles have triggers that have too much play, are hard to pull and make releasing the trigger similar to releasing a slingshot. As many readers will recall, I've always been a strong advocate for a clean, crisp trigger. I've stated many times that the trigger is the only communication the shooter has with the shot he is about to fire. Although not all rifles can have their triggers adjusted or even replaced, some can and should.

I know from actual experience that most hunters do not know the importance of a good trigger. They accept what's or the rifle without realizing that the trigger could be the main reason they have problems with accuracy.

One of the features that many of the new products have is an adjustable trigger. Manufacturers have finally realized that just any old release mechanism is not adequate. Perhaps it's because so many scopes are now

**FOR THE RIFLEMAN WHO WANTS A** more challenging job, a completely new stock, perhaps a laminated model as shown, can keep him busy all winter.



used and the shooter can aim better that has created a demand for better triggers. Personally, I'm against filing sears or any part of the trigger unless it's done by a qualified person. I have taken regular military triggers such as the Mauser and honed them until they had a crisp four-pound pull which is plenty light for a big game rifle.

Adjustable triggers are available for many makes of rifles. I would install a complete trigger before I would try to modify the factory one.

Another wintertime project to consider is installing a scope. I feel there is no greater asset to any hunter or shooter than a properly mounted scope. I happen to be writing this article during the first part of the early small game season, and just today I shot two gray squirrels from a tree that stood 48 yards from me. Considering that the squirrels were very high in the tree, my bullets had to travel well over 50 yards. This is

not so amazing and it doesn't prove that I am an exceptional shot, but the fact that I could see the squirrels through all the leaves and foliage does prove the value of a scope.

My advice on scopes is to buy one of high quality with a good solid mount. With this type of scope and mount, there should be no problems during the coming years if reasonable care is taken.

Have I convinced you to do a wintertime project on your favorite rifle or shotgun? Naturally, some of the ones I have mentioned are not the do-it-yourself kind, but just getting involved with your firearm during the long winter months is rewarding in itself, plus getting something of value besides. Instead of worrying about the long, cold nights ahead, finish a stock, buy a scope, or contact your local gunsmith for a new butt pad, sling, or adjustable trigger. Chances are the winter will pass before you realize it. . . .

---

### Our Kind of Guy

The water ouzel is an oddball among songbirds. It walks under water, swims with its wings, grips the gravel with its toes, has scales on its nose, oils its feathers, builds its nest on a ledge behind a waterfall and lives out its life along the water's edge.

## Looking Backward . . .

“. . . Mr. Rhoads says, quoting Mr. Seth Nelson:

“In the period between 1861 and 1865 the deer became so numerous in that county (Clinton) that they generally damaged the crops, and snaring was employed to diminish their numbers. In contrast with this there were killed in 1895, in the vicinity, all told, only ten deer, and most of these out of season, by wild hounds or pot hunters. The chief agencies in the extermination of deer are forest fires and wandering dogs, both of which pursue their relentless course during the entire year, the latter being ten times as destructive as the Gray Wolf ever was.”

Warren (1897), p. 510.



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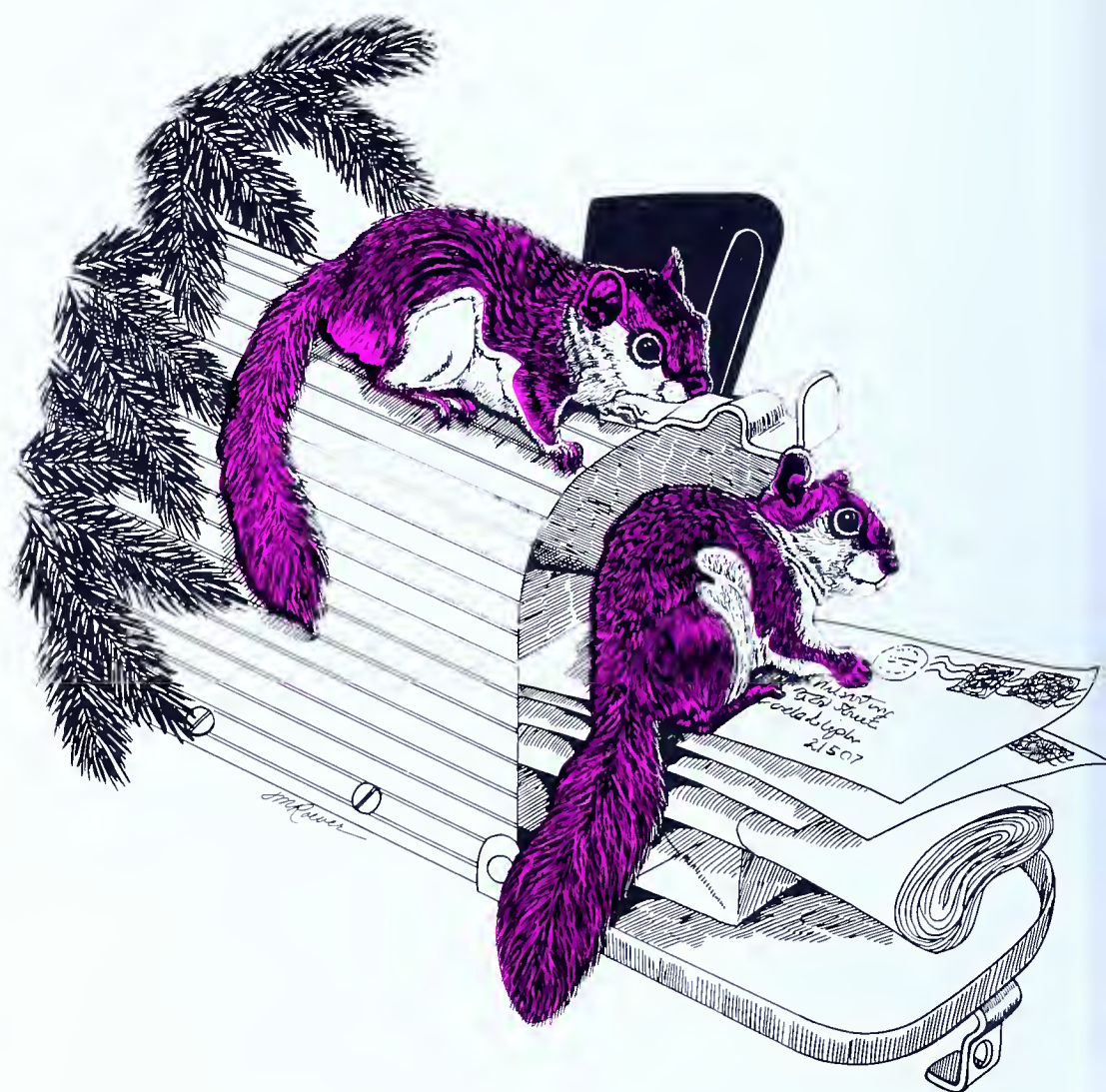
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we're wishing you  
**A HAPPY NEW YEAR**



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# PENNSYLVANIA GAME NEWS

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#### COVER PAINTING BY CLARK BRONSON

The cardinal is the most conspicuous songbird in Pennsylvania at this time of year, his scarlet feathers making a brilliant contrast with the usual snow cover. He is a permanent resident of the state, and though his numbers seem far from great he is by no means rare. He normally eats seeds, grain, insects and fruit, but can easily be induced to visit a feeder near your window in winter. Young children seem especially intrigued by his showy appearance and rather aggressive manner. A cardinal's nest is a thin cup of weed stalks and grasses. The female lays three or four eggs which are white, speckled with gray and lilac. Incubation takes 12 days.

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## **A Veritable Which of What ? ! ?**

**A**N ASSOCIATED PRESS squib in the paper the other day reported that during the regular 1971 season National Football League attendance passed the 10-million mark for the first time. I was impressed, as doubtless many others were—big numbers have a way of affecting Americans, and even in these days of casually shrugged-off billions, 10 million is a real bunch when it's people, not dollars, you're talking about; after all, 10 million people is more people than can be found in New York City and Catawissa, Pa., combined. But I've got a hunch that the reasons I was impressed aren't exactly the same as the reasons which impressed the sports editor of the *Washington Post*. I mean, he probably thought those people went out there to see a football game. Or 182 football games, to be precise, which I suppose is what we should be, since precision has to be an important factor in an endeavor which a score of sportscasters continually tell us is a game of inches. Sometimes I feel sad that we aren't on the metric system, so they could tell us how it's a game of millimeters. . . . "A veritable plethora of millimeters," as Howard Cosell might phrase it.

But to get back to those 10 million football spectators, those so-called hard core fans who plunk down their ticket money week after week and actually make the big Sunday trek to crowd themselves 56,937 deep into each of a dozen stadiums (stadia, Howard?) through the months-long season. These are the genuine dues-paying football aficionados, club owners feel, not to be confused with the ersatz freeloading variety which slumps bug-eyed before the TV, moving only to build a sandwich during the commercials (the number of which does make it difficult to avoid gaining weight in the fall).

Well, we have news for these club owners, sportswriters, commentators and the rest of the veritable plethora of that ilk. We hate to say it, knowing it will break their hearts, but the simple truth of the matter is, those 10 million hard core spectators are not really football fans at all. They are displaced duck hunters.

Does that shock you? It shouldn't. As an outdoors oriented person, the indications should be obvious if you've given it any thought. Ask yourself who looks forward all week with uncontrollable anticipation toward The Big Day. Who gets up before daylight, wraps himself in layers of insulated clothing, meets his buddies, drives a hundred miles, walks two more carrying blankets, thermoses, binoculars, etc., crowds into a too-small place shoulder-to-shoulder with other kooks, and spends hours watching for something to fly past? Only duck hunters. So next time you hear about all those football fans, don't take it too seriously. They're just disappointed gunners who daren't hunt on Sunday and therefore use football as a means to an end—being miserable. Which is why we're out there with 'em.—*Bob Bell*.



IT WAS IN THE DAYS WHEN  
THE WORLD WAS NEW...



# CANDLEMAS

## A Legend From the Shade Gap

By Henry W. Shoemaker

**N**ER MIDDLESWARTH, that splendid Connecticut Yankee who by long residence in Snyder County became the "Dutchest" of Pennsylvania Dutchmen, was very fond, in his latter years, of recounting old stories which he heard when he first penetrated into the wild country tributary to the Juniata, stories of Indians, borderers, outlaws, witches, and also quaint folklore and traditions. He often told his family he had made notes of some of his more remarkable experiences; that when he had the time he would write a book of reminiscences.

But the chance never came, his busy life extended to the end, and when he passed away, several years past his eightieth birthday, his story went to the grave unrecorded, except in the form of the above-mentioned fireside entertainments.

To listen to him was like sitting before a Pennsylvania edition of the Arabian Nights! The one-time speaker of the House of Representatives at Harrisburg was not so well acquainted with Job Chillaway as with another famous Indian of the Juniata Valley, Captain Logan. This is the Logan for whom the Logan Valley below Altoona was named, on account of his having lived for some time near Martin Bell's old furnace.

Captain Logan was the oldest son of old Shikellemus, Colonel Conrad Weiser's friend, and the vicegerent of the Iroquois Confederacy at Shamokin, now Sunbury. On his father's death in 1748 he was proposed for the vicegerency by Weiser, but was disqualified by the Council of Chiefs at Onondaga, because he had only one eye, a supreme defect to the Mingoes, who all but worshiped physical perfection. Without his official designation he strove to exert an influence over his race, but by 1750 he withdrew to the Juniata Valley to spend the remainder of his life away from the intrigues and duplicity that had its center at Shamokin. During the Revolutionary War he rendered invaluable service to the Colonies, especially in dealing with the notorious Tory, Weston. A younger brother, James Logan,

who was killed in 1780, was known as the greatest of Indian orators, and lived for several years at Logan's Spring, near Reedsville. Captain Logan often revisited the scenes of his youth at Shamokin, and usually traveled on foot through Middle Creek Valley, as the best way to reach the forks of the Susquehanna. He always made it a point to break the journey by spending a night at the Middleswarth homestead near Beaver Springs. He was particularly interested in the Middleswarths, as the older generations in Connecticut had befriended some of the Pequots after their last great defeats, when they sought refuge in the northern forests in the Nutmeg State. Some of these Indians later were converted by the Moravian missionaries, Buttner, Rauch and Mack. Captain Logan felt that the Middleswarths on their record could be trusted as true friends of the redmen, consequently he could break bread with them without fear or mental reservation.

### Groundhog Day

He was therefore particularly happy when under their hospitable roof, and often recounted to the head of the family quaint incidents of the long vanished past. On one occasion the subject of "groundhog day," the second of February, was alluded to, and the old Indian laughed, remarking that it was an Indian tradition, and that he would like to tell the complete story of how the groundhog came to be the patron saint of Candlemas. As is well known, this is distinctively an American superstition, but its limits do not even extend to all sections of this country. In Northern New York the bear is the animal which sees its shadow, almost similar to the old superstition of France and Spain. In Germany it is the badger which sees its shadow on the fated day in February. The old French tradition runs as follows: "Le jour de la Chandeleur si le soleil paraît avant midi, l'ours rentre dans la tanière pendent quarante jours." Another version has it, "A la Purification,

grand froid, neige abondante *ou sinon* l'ours sort de sa tanière, fait quelque tours et rentre pour quarante jours."

When Ner Middleswarth's family came to Pennsylvania they brought the bear story with them, and were not a little surprised to find that in their new house bruin had given way to the groundhog, or as they had called it in Litchfield County, the woodchuck. They asked their Dutch neighbors, who seemed to know nothing of how the woodchuck had taken the place of the bear and the badger. Some of the older Germans remarked that they were surprised to find the woodchuck the arbiter of the seasons, but they had adopted the local tradition along with the other pleasures or hardships of the frontier. One must go to the Indians to find the origin of the famous groundhog story. But most of the Indians who passed up and down the valleys spoke very little English, and were inclined to be uncommunicative on any subject that might bring edification to their white successors. They were accused of knowing of mines of rare metals, and keeping the information from the whites. As a rule they were surly and taciturn, ever ready to ask favors, but wanted to give as little as possible in return. They could not grasp the philosophy of the white man's central idea, that he was giving his civilization to a wild country, even if an entire race of human beings had to be blotted out in the process. All they saw was a lot of white-faced creatures, for the most part illiterate, wasteful and cruel, living in crude log cabins on the lands that had formerly belonged to the Indian race, and were theirs still by right. They had been cheated or driven by force off these lands, where they had grown crops as good as the white man's, or where they had hunted and fished according to methods that would shame a latter-day "conservationist." They were a wronged race, driven from post to pillar, all for a thing called "civilization," which at bottom possessed no heart, no soul, no decency, no kindness.

The only white men whom they could tolerate were the gentle Roman Catholic or Moravian missionaries, whom they regarded as dupes of the mercenary captains of "civilization." But the few remaining Indians, roving aimlessly through the hills and valleys which they once controlled, were often short of food. They had to make friends with the settlers to get a bite to eat, or a night's shelter, or a little work. They were a lot of unhappy ghosts of an

order of things which may have been as near perfect as any scheme of life we have today.

The Pennsylvania Indians were not savages, but industrious, decent beings, fearing their God, and just to their fellows, until stripped of their homes, their livelihood, and frequently their women and children, they became crazed by their wrongs, and on the warpath, and by the midnight sortie, sought to annihilate their cowardly white conquerors. Their story is a sad one, yet the justice of it is beginning to dawn on all fair-minded and temperate Americans.

But it is too late. Gone are the noble redmen. They will never know their cause has at least been recognized as right by some. Of all Indians Captain Logan cherished less rancor and bitterness, considering the extent of his bad treatment by the whites. Blinded in one eye by a white man, thereby forfeiting the vicegerency, then stripped of his lands, his brother's family murdered by whites, even his humble cabins at Tyrone, and also at Chickalacamoose taken from him through faulty titles, he became in his old days a wanderer on the face of the earth. It was no wonder, therefore, that his heart warmed and his spirit expanded in such hospitable homes as that of the Middleswarth family close to the "Juniata Divide." The old Indian declared that he could only think and talk of the past by the firelight, and at night. Candles were accounted a luxury in those days, so his wish was readily granted. Then, he said, he felt he was again by the patriarchal campfire on Shikellimus's Run on the Miller farm near West Milton, where his old father, the great vicegerent of the Iroquois, would gather his children about him and tell the stories of the dim and distant past.

It was in the days when the world was new, thus the redmen always began their

*This is a chapter from Henry W. Shoemaker's Juniata Memories (John Joseph McVey, Philadelphia, 1916). Subtitled "Legends Collected in Central Pennsylvania," this book is a fascinating compilation of early Pennsylvania stories which have long since vanished from the memories of even our oldest inhabitants. We hope this portion of it will hold your interest as much as it did ours.—Ed.*





**THE BIG BEAR GROWLED, SHOOK HIS huge head and gnashed his teeth, looking as if he wanted to annihilate the entire race of groundhogs.**

tales, when the Indian race was in close communion with the Great Spirit, and the secrets of the Infinite Workshop were revealed to his chosen people, that the bear gave displeasure to the exact balance of things by his ravenous appetite. So great was his destruction of the lesser creatures, as he was then on a strictly carnivorous diet, that it looked as if his race would devour all else except mankind. As like all creatures he was created for a wise purpose, it would have been wrong to exterminate him, consequently he must be checked in his folly. He must be taught discretion, taught to take his proper place in the scheme of nature.

The Great Spirit was then experimenting with the various forms and means of life, so he tried putting the bears on a herbaceous diet, and in a short while their fierce claws lost their power to kill. That lessened their destructiveness, but they soon began to work havoc with fruits and gardens, to become foes of plant life. Then this herbaceous diet was modified so that they subsisted chiefly on plants, berries, and fruits, and to make up for the lack of their principal diet in winter, a long sleep or hibernation was decreed for them. This worked very well, for the bears were glutted with nuts, fruits, corn, and berries by the time the autumn set in, and were ready to climb into some dark retreat to "sleep it off."

So the bears, as the season advanced, congregated into section of the country where caverns and sinks abounded, where they staggered about half asleep, quarreling for the possession of the darkest recesses. Their long sleep was said to be a dreamless one, they were literally dead until the early days of February. In Europe it was generally about the twelfth of February when they emerged from their retreats, while in Pennsylvania it was about ten days earlier. Then they became restless and sallied forth to wander about the winter landscape.

**Shadow Means Sleep**

Being too clumsy-footed in the deep snows to capture any game, and unable to dig out any food from under the drifts, many of the poor creatures perished from hunger and exposure. Benumbed by cold, they could hardly reach their caves in safety, or when they got to them, they were so hungry that they could not fall to sleep, so the Great Spirit again had to go to the rescue of the bears. This time it was decreed that if the bear which emerged first from his cave, on a day, which later curiously enough corresponded with the Candlemas Day of Christian countries, and saw his shadow, he should return to his hiding place immediately and not wake his fellows, and all would sleep for forty more days. This was

because in high mountains, where the bears made their homes, a clear day in early February usually signified continued cold and snows, an indefinite prolongation of winter. If on the other hand, it was foggy or cloudy, it presaged thaws and milder weather, an early spring. Early February was a climatic period, and its prognostications rarely went amiss. It is the month of those beautiful fleecy white clouds called "Indian clouds." So the bear population were saved much trouble and suffering, and became animals of kindly and gentle nature in appreciation of the favor thus bestowed upon them.

It was considered a high honor to be the King bear, or Head bear, the one which felt the first impulse to awake, to crawl outside to inspect the weather prospects. In the autumn in chestnut season, in that most glorious period of Indian summer, when a pale mauve haze hangs over the mountain landscapes, and the air is sweet with the odor of drying leaves and wild fruit, when it is hard to tell where mountains end and sky begins, the bears met in the Shade Gap, and gradually it came to pass that they elected their leader, or the "Awakening Bear." Usually the elections were of a harmonious character, more so, said Captain Logan, than some elections in the eastern counties when Dutch and Scotch-Irish battled for supremacy at the polls.

Generally the biggest and strongest bear

**THE GROUNDHOG was found and informed of his new position, which he accepted with a neat little speech. When the big bear appeared, he was attacked and killed by the other bears.**



was chosen for the honor, like in Captain Logan's day, rich men and landowners monopolized the highest positions in the gift of the State. The bear that won by the count of noses was escorted to where the nuts and pumpkins were the thickest, and left to gorge himself unmolested. He must needs eat an extra store, as if he awoke and found winter still raging, he should have a comfortable feeling in his stomach, else he could not get to sleep again. Perhaps it might have been better to lay up a stock of provisions, but the bears preferred spring food in springtime, and nine times out of ten they found the extended period of winter, when it was easier to go to sleep again than to sit in a damp cave and live on mouldy nuts.

### Often Re-elected

If the bear chosen as leader was such a big bear that his sway was not easily disputed, he was re-elected for years in succession until some younger bear outstripped him in size and influence. In those distant days there were bears of various colors in Pennsylvania, some shiny black, some foxy red, some brown, some yellow, and a few white. For some reason or other the black bears usually chose the leader from one of their number. It may have been an earlier phase of Ernest Renan's saying, "The black heads are always the rulers." But among leaders of mankind, Caesar, Napoleon, Washington, Hamilton, Jefferson and Grant were not black-haired men, but on the "red-headed" order.

At the time of the appearance of the first permanent white settlers in Pennsylvania these bears of various colors were still to be found. The black bears were vastly in the majority (there were two varieties of these, "hog" and "dog" bears). Next in numbers came the red bears (the last one was killed in Union County in 1912), then the brown bears (one was captured alive in Cameron County in 1914), then the yellow bears (one was killed in Susquehanna County about a century ago), and lastly the white bears, which were always the rarest, the last one known having been taken in an animal drive in the present confines of Snyder County by "Black Jack" Schwartz in 1760. All came from the same original stock (*Ursus Americanus*), but formed distinct and separate families. At one period in the early history of the bear tribe in Pennsylvania, a black bear weighing a thousand pounds was elected leader for twenty-one years in succession.



He was a surly old bear, a conceited old bear, but being of such tremendous bulk and of the popular color, he always triumphed in the animal contests. He wore his honors niggardly, begrudging the fact that he had to get awake and crawl out in the cold, yet he would not relinquish the privilege to any younger bear, would not think of such a thing.

Plots were raised by pugnacious young red or yellow bears to oust this swarthy despot, but they always faded away on election morn, when the big black bear eyed the electors during the count of noses. "Unanimous for the Big Black Bear," was invariably the result. As years wore on "the big fellow" became so lazy that when he became awake he would do little more than poke his nose out of the cave. He hated to think of finding "winter over"; it meant long journeying to all the other bear caves in Shade Gap, to inform the various bear families that it was time to "be up and doing." If there was any chance of his making a mistake in favor of a prolonged winter, he was calculated to do it.

This displeased many energetic young bears, who hated to have so much time taken out of their lives by the period of hibernation. But no bear was strong enough to oust the Big Black Bear, so he continued his undisputed sway. He was an exclusive, almost regal, old bear, occupying a cave high upon the mountainside all by himself. He had a black mate, and many generations of black offspring, but these he only mingled with during the outdoor life in spring, summer and autumn.

One winter morning when he felt the signs of awakening consciousness, which betokened that his onerous task was before him, he stretched and flopped himself about the damp stone floor of his cave, loath to get up and venture out into the February air. As he rolled about his cavern he felt something soft and furry. He caught it with one of his huge paws and drew it to him. It was a small and badly frightened groundhog. The little creature squeaked and squirmed, begging that its life be spared. The big bear growled threateningly, and shook his huge head and gnashed his teeth, so that he looked as if he was going to

annihilate the entire race of groundhogs for this one's presuming to enter his inner sanctum. But instead of devouring the little animal he put a proposition to him that he would spare his life if he would go outdoors and see if the winter was over.

The groundhog, very grateful, hopped outside. It was dark and foggy, the mountains across the valley could not be seen, water was running off the outer ledges of the cave. He hurried in and gave the news to the giant bear. The bear grunted. He was sorry that winter was over, and told the groundhog that his work was by no means finished. He must visit all the bear caves and pits in Shade Gap on both mountains, and inform the occupants that the winter was at an end. The groundhog, though he was frightened at the prospect of facing so many strange bears, obeyed, and crawling in the caverns, bit at the bears' ears until they awakened, whispering to them their chief's message.

When the bears had all assembled in the ravine at the Gap, they held a council of war. They were angered at the laziness of their leader, whom they had honored so many times. Yet, after long deliberation, they could not select another bear to take his place, so many wanted the honor. So one sagacious yellow bear, next in size to the unpopular black monster, suggested that they depose the big fellow at once and name the groundhog as their "weather prophet" for life. This was decided on by a growling, grunting majority, many of the black bears in the heat of passion voting with their lighter colored fellows.

The groundhog was found and informed of his new position, which he accepted with a neat little speech.

In the midst of the proceedings the big black bear appeared on the scene, pausing every now and then to scratch his sleep-seared eyes with his soft claws. Quick as a flash the others bears turned on him, and before he could utter a plea for mercy, he was so badly torn and clawed that he soon died. And ever since that time the groundhog has been faithful to his trust, and gives the signal of the continuance or the end of King Frost's reign to all the bears, and to the members of his own little race.

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### They Get Around

Polar bears are known to travel from 30 to 50 miles a day on an ice pack which may also be moving at approximately the same rate.

## A New Dimension to Grouse Hunting

By Nick Sisley



**A**T THE SOUND of the blast, I jerked my head in the direction of the shooter. I was greeted with that thin cloud of blue-gray smoke so typical of black powder.

"Get 'em?" I called to one hunting buddy, Jim.

"Yeah, and there might be another," he answered. He walked on ahead, but with no results.

"Did my dog point it?" asked the other member of our party, Larry.

"No, he routed it," Jim said.

"Shouldn't have asked," responded the setter's owner.

When there was no further action, Jim picked up his dead bird and asked us to wait while he reloaded. We were all hunting grouse with muzzle-loading shotguns, and to refill the fodder in one of these old-timers takes some doing. Jim was introducing my grouse hunting buddy and me to an even more challenging way of hunting this most esteemed game bird. Jim has been a muzzle-loading fan for years. Neither Larry nor I had ever had one in our hands before.

That first grouse fresh in his game pouch, Jim removed the spent cap from under the hammer of the fired barrel and, for safety's sake, the live cap from the second barrel, poured in a charge of powder, pushed down an over-the-powder wad with the ramrod, doled out the prescribed amount of shot, then placed an over-the-shot wad on top of the barrel and rammed it, too, home with the rod. Fresh percussion caps placed over both nipples, he was ready to go again.

But just before he finished doing all this, another grouse thundered out from below him. Both Larry and I were too far away for a shot, thus this one escaped unscathed. "That's typical when using muzzle-loaders," commented Jim. "Every time you're tied up doing something with these old-fangled guns, a bird gets away. Makes it all the more challenging, though—and frustrating."

We had left the car about an hour prior to Jim's bagging this grouse, and it was the first of many we raised that day. Both Jim and I find plenty of



time each season to participate in our favorite sport. After a particularly good grouse flush day in November, I called him and bragged about my success. He responded by saying we would have to get together during Pennsylvania's extended season after Christmas. We scheduled our hunt just a few days prior to New Year's, and decided muzzle-loaders would be our choice of firearms.

Larry and I are continual grouse hunting partners. At the time I was down to one bird dog, and he was good enough to offer his canine power to help on this hunt. Jim brought us each an old-time fowling piece, and before we entered the woods, he checked us out on the safety aspects. We quickly learned that muzzle-loaders are safe and simple to operate.

### **Don't Use Smokeless**

A percussion cap goes on the nipple under each hammer. Struck by the hammer, the cap ignites the charge of black powder in the barrels. Smokeless powder must never be used in these old guns. Black powder produces far less pressure than its smokeless counterpart, and these old guns usually have "twist" barrels that can't take the modern stuff.

We moved on. Larry and I were anxious to connect on our first game with these antique guns. For this hunt we were using Zeke, Lawrence's aging setter, and my young setter, Del. We kept going in the same direction, hoping to reflush the bird that had flown out while Jim was reloading.

The wooded section we were working ended at an old field, and a big bunch of grapevines at the edge looked like a perfect place for the flushed bird to seek shelter and refuge. My setter catwalked into a point, and seconds later Zeke made a back.

We hunters covered the tangle, each trying to pick the most advantageous escape route. Larry made the proper choice, but when the bird went out, there was considerable thick brush to

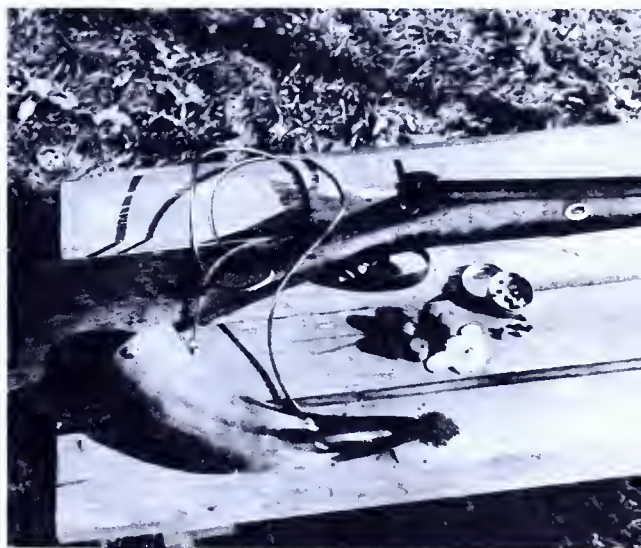
absorb his 7½s. There wasn't time to thumb back hammer number two—but then, there seldom is. The bird angled down the fencerow bordering the field toward a 10-year-old stand of pines.

"Let's follow him up again," Jim called. We did.

Not, however, until Larry went through his first experience of loading a muzzle-loader all by himself. Jim was there to supervise, but in reality, there is no complicated procedure here.

We never found that bird again, but we were soon into others. At the far end of that pine stand we moved three birds, but as is normal in flushing grouse in pines, we got no shooting. It did give us the opportunity to go to work on them, though. Once flushed, it has always been my experience that grouse somehow give off more scent, thus giving the dogs a better chance to either show their mettle or make a mistake. And with a bird as wary as the ruffed grouse, all canines make their share of mistakes, especially the pointing varieties.

But still we didn't get another chance to shoot until a good while



**ONE OF THE OLD** muzzle-loading shot-guns used on the hunt; also shown are the percussion caps, shot, wads, powder and powderhorn.

later when we were working back toward the car. In a deep hollow, Larry flushed three birds in a flock, and when he hollered, "Birds," the fourth got up. Certain we would get reflush action on these, we went in pursuit, eyes scanning the terrain ahead.

The first one flushed in front of Jim. I saw it when the bird was a long way out. Jim shot, the smoke cloud went up, but the bird didn't fall. "Why didn't you shoot?" asked Jim.

"I thought he was too far out by the time I was ready to go into action."

Still sure there were more birds ahead, Jim didn't reload but continued to move forward with one barrel still charged. Fifty yards farther my setter pointed, and by the look of his posture, the bird was right under his nose.



**EFFECTIVENESS OF muzzle-loaders is shown by this pair of grouse. Note graceful straight-grip stocks on these doubles.**

Unfortunately, the bird went out while we were still walking in. Larry touched off his M-L this time—a 45-yard shot, if I ever saw one.

"He didn't come down," called Jim, "but I'm certain you put shot into him."

### Trudged Up Hill

Hoping one of the dogs could find this one, we trudged on up the hill, each looking for a sign of a hit. We did find feathers shortly, but I had seen the bird still flying a good ways farther up the hill, so we kept on. Nearing the top we had all given up hope, when the old setter, Zeke, arrived with a grouse in his grasp. None of us saw where he found it.

A broad grin on his face, Larry stooped over and took the warm bird from the dog's clutch. My friend had made his first score with a muzzle-loading shotgun. We all three admired this one, then walked toward our nearby car.

During lunch we discussed guns and dogs, as I suppose all hunters do. When we had finished, we turned out two of Larry's dogs, Al and Doc, both pointers. We decided to hunt the same area we'd covered in the morning.

We started back the old logging road that we had returned on before lunch. Not a hundred yards from the car, Al went on point, and Doc, who had been jogging along right behind him skidded to a back. Al was pointing at a log, just up over the bank. It looked like a perfect hide for a grouse, and though a little unprepared when the bird went out, I did manage to fire that little muzzle-loader of mine. There is not as much smoke produced as we hear about. Oftentimes I have read that the hunter has to duck under the smoke to see if he has scored on his game or not. I had no trouble at all seeing that grouse flit off unharmed. Had I been using one of my breechloaders, I would certainly have been able to get off a second shot.



With the muzzle-loader, I didn't even reach for the second hammer. I was content that I had at least got to fire Jim's relic.

Larry and I were unfamiliar with these guns, thus perhaps a little slow to move into action. Jim was certainly quick though. Once accustomed to the hammers, I am sure that the first shot with a muzzle-loader can be just as fast as with a modern arm. The second shots don't come too quickly, since you must cock the second barrel after firing the first. Jim warned us against cocking both hammers at once. He said that the load going off in the first barrel could jar the hammer of the other barrel, creating a double fire. One of the biggest thrills of Jim's muzzle-loading days came on an afternoon when he missed a grouse on the first shot, only to have it tower into the open, giving him time to thumb back the second hammer and bring it down with the left tube. Such results don't come often.

### Nothing Happened!

Half an hour later, we walked out into a clearing, started talking, and a grouse thundered out from a draw ahead, but angling back across my side of the open spot. I raised the old gun, thumbed back the hammer as it came up, and as I passed the target, touched it off. Nothing happened! My first thought was that I'd had a misfire, something that Jim said happens occasionally with these relics. But on inspecting the hammer, I saw it had fallen alongside the nipple. Closer observation showed that the hammer screw was loose. I tightened it with a dull pen knife, tested the hammer fall several times, recapped the nipple, and off we went after that bird. All the while I was wondering if things like this really happened to our ancestors. Undoubtedly they did, and I had the nerve to complain a little to myself about the mishap. Think how frustrated those 19th century folks felt each time a misfire occurred. They



USING OLD-STYLE GUNS adds an unusual touch to grouse hunting, making a challenging sport even more difficult—and interesting.

needed the meat for survival in many cases!

An hour later I had another chance. This time it was my unfamiliarity with the muzzle-loader that proved my undoing. A grouse went out not 10 yards ahead. I was mentally alert and carrying the muzzle-loader at the port arms position. But when I pulled back on the hammer as I raised the gun, my thumb slipped off. I had to grasp the spur again, this time firmly. I let fly, but the grouse either had too much brush between him and me, or my faux pas with the hammer had me too flustered. At any rate, Old Thunder Wings escaped unscathed.

Not long after this episode, the young pointer, Al, made a find as we were working our way along a slanting hillside. Lawrence watched the dog while Jim took a crack at this one. But he fired too quickly, before the pattern had a chance to open for some spread, and as usual, the bird was out of sight before Jim could thumb back the left hammer.



**ON THE WAY OUT** of the woods, a proud grouse strutted across the snow-covered road ahead of us. We watched him go out of sight, wishing him well.

On another chance Doc locked up on a bird at the edge of the pines. Since I was the one who hadn't bagged a bird yet, my partners told me to take this one. Jim unlimbered his camera. Ever tried to shoot a grouse in thick pines? It's impossible. And I proved that fact once again!

During a pause for one of us to reload, Jim commented that doing so was one chore involved with muzzle-loaders and grouse hunting that he didn't mind at all. He welcomed the rest! The terrain we were hunting was very hilly, and every time we got a bird to flush, it seemed to go uphill. Sound familiar? The first time Larry and I reloaded, it probably took upwards of 10 minutes. But as the day wore on we got the knack of it. By the end of the day we would do it easily in a few minutes.

To make things easier, Jim has the powder and the shot charges pre-weighed. It's then only a matter of pouring them down the barrel and stomping home the wads. Measuring does take time, and with winter hunt-

ing and cold hands, you can bet some of both will get spilled. But a little less black power or shot doesn't mean too much in the way of effectiveness with these guns. At small game ranges, they are potent enough to get the job done. The loads we used were comparable with modern low velocity shells.

### **An 18-Gauge Gun**

The firearm I was using was an 18-gauge, one we modern gunners might be surprised at. Equally so, Jim's and Larry's guns were 14-gauges. Mine was light, just over six pounds. Its barrels were about 28 inches long. The bigger bored guns my friends were using went eight pounds or more, and barrels were longer.

Jim said that the worth of these guns varies considerably. By and large, however, they can be bought for about \$50 to \$75. In most cases they will need repair work. They should be taken to a reputable gunsmith to have them declared safe or restored to working order. Spare parts are available from several catalog houses that deal in old firearms.

Jim said the wood is the biggest seat of trouble. Some of these guns are over 125 years old. Wood deteriorates during such a long period. Jim doesn't fool around with a half-way job of repairing these old stocks. He uses modern bolts, screws, fiber glass, glue, or whatever is necessary to repair a broken stock to insure that it has ample strength to hold up under firing. Jim is careful, and he has never had a mishap yet.

When we worked back to the car this time, Jim wanted to try a new place. There wasn't much shooting time left, but Larry drove to a spot that had produced for him before. It was a small cover. My setter, Del, was on point about halfway out through the thicket, above a high running creek. We walked in ready, Jim below, down by the creek with the camera. Glad to say I hit this one good.



That was the end of the hunt. We had not flushed as many birds as I had bragged to Jim about during the regular November season, but we had seen our share. Grouse are unquestionably the most challenging game bird that flies. When one is dropped, even with the most modern equipment, there is great satisfaction. But now a new segment has been added to our sport. Jim introduced us to the challenge of hunting with percussion cap muzzle-loading shotguns, and both

Larry and I are absorbed by it. Unlike Jim, we are not going to forsake our modern breechloaders. Jim hunts with nothing but the old relics anymore. But Larry and I are looking for old muzzle-loaders. Some day soon we'll find one in somebody's attic or gathering dust in a sporting goods store. And when we do, we'll know what to do with it. How about you? Care to add a new dimension to your hunting sport? A muzzle-loader could be the answer.

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## Trophy Room Memory

By Jack Ryan



**I HAVE GOT MY SHARE** of bucks. None comes close to a record, but one is a beautiful 8-point which I have mounted and hanging in my den.

**C**ALL IT WHATEVER you want to —trophy room, collector's corner, cube, "his" room, retreat, study, or any other name. I suppose most hunters and fishermen prefer to call it their trophy room, even though actual trophies are more often than not very scarce. I like to call it my den. My wife calls it my "upshook" room, whatever that means. I think the most accurate name for it would be collector's corner.

But what's the difference what one

calls it? The main thing is the fact that each man should have a room or place that he can find privacy. A place where he can read, write, tell lies with his buddies, or just sit and daydream.

As I sit here and look around my little room, I have to smile, because I guess it isn't really much. But it is all mine, lock, stock and barrel. Record-class trophies, there are none. But record-class memories abound.

Every item in my room has a story, leastwise, a story for me. Or maybe I should say a memory or a reminder of another day or night, somewhere in the past.

Someday I hope to write the story that each item tells, and share their memories with all outdoor interested people.

The wealthy hunter or fisherman can have all of his outstanding heads mounted and have an impressive trophy room. Sure, we average guys dream, plan, and wish for those trips and trophies, but in most cases they will never be more than dreams. Still, a lot of my dreams have become realities for me, and I have many more I hope to make come true.

At no time do I wish to condemn or offend those that financially have it. We average guys read in the magazines month after month about those wonderful safaris, the trophies that make the record books, the catches that didn't get away. We admire them, and envy them. We even say to ourselves that someday we will hunt or fish there. But that is all part of the dream, like the record whitetail rack we are going to hang on our wall each fall, when deer season draws near. For that is one hunt that most of us guys make. And I for one have been very



lucky, I have gotten my share of bucks. None of their racks have come close to making the record books. I save all of the antlers, and have one fine beautiful 8-point head mounted. It is the best rack I have been able to come up with, but I have killed larger deer, and smaller.

I once read a poem or story—I don't remember where it was or who wrote it—but the thing I do remember is that it was something about "a 4-point buck hanging near my cabin, and I killed it on the mountain miles away." The words have stuck in my mind.

### A Little 4-Point

As I look around my room, I see a little 4-point rack hung on my wall (I cut a section of the skullbone with the antlers attached, then place them on a small board or just put a nail through the skull and hang them on the wall). It is one of the least impressive racks I have collected. It is not pretty and it is small. But from there on everything about it and every memory of it are great. All I have to do is look at it, and memories of one of the most enjoyable, satisfying, and exhausting days I have spent in the woods come back.

It was only a few years ago that I collected this "poor" trophy. I hadn't saved any vacation time that year, so I didn't expect to get to do any hunting before Saturday of the first week of season. But faith and weather took a hand. Thursday night it snowed all night, and Friday morning it was still snowing. I was scheduled to run, but the roads were so bad that all trips were cancelled (I drive a trailer truck). I was debating whether to try to go hunting when my brother, who lives on a farm in the mountains, stopped. He had a load of coal on his truck and was chained up. He suggested that I ride home with him, then I could hunt until evening when he would bring me back. The weather was bad, but I liked the idea. My wife said, "You're the boss." I said,

"None of that, no boss, side by side; wish me luck."

It was about 10 a.m. when we reached the farm. My father asked what I was going to do. I said, go deer hunting. He said I was crazy, it wasn't a fit day to be out, there wouldn't be another man hunting. I answered I knew that, but if I could get a buck up, I could track him down, 'cause the snow was getting near knee-deep and still coming down.

With everyone's misgivings except my brother's, I started out. The woods were so snowed under that it looked like a white jungle fairyland. After I was in the woods a few minutes, I wondered if maybe Dad had been right. I decided to head for a large crab apple thicket, where I knew deer often bedded down.

When I reached the thicket I was a little amazed. The wild crab apple trees looked like white pine trees, they were so loaded down with snow. I had only moved into the thicket a few yards when I spotted a deer lying under a large crab apple tree. He was looking straight at me. I could see his



**SOME MEN CALL THEIR** getaway place a trophy room, others a collector's corner, study or den. My wife calls mine an "upshook" room, whatever that means.

large spikes plain against the snow background. But when I threw my rifle up, I could not see the sights. It was my first hunting after I started wearing glasses, and I guess I really had them snowed up. Of course, that buck didn't wait around for me to clean my glasses. He left those parts in a cloud of snow.

I removed my glasses, cursed my stupidity, put them in my pocket and lit out after that little buck's tracks. My guess is that it was near noon. Well, we had quite an afternoon, that little buck and I. He must have known that I couldn't see very far, for he circled around, cut back in his trail, then he would jump as far to one side as he could. I kept after him, but not being in the best of shape, I was really tiring. Deep snow trailing was not as easy as when I was a kid. Getting old. The snow was just over my knees by now and still coming.

#### **Movement Across Valley**

Finally he seemed to have decided to go somewhere. I followed his tracks out over a small rise, where he then went down into a valley. I stopped to get my breath, and had just started to follow him again, when some movement across the valley caught my eye. There he went up through a newly cut-over patch. He was clearing the down treetops and a very pretty picture. I groaned, threw my rifle up, picked out an opening and when he hit it, squeezed off a shot. I wasn't, at the time, sure what happened. He made a square right turn and started out across the cut-over stuff again. I got off another shot. That time he sledged, head first, for about a dozen feet, and then was up and into the thick cover again.

All the time I had been tracking I had hoped to get him into that cut-over area, but I sure didn't want him to come out that far away. I crossed over to where I had first shot at him. The story was plain in the snow—I had broken his right hind leg. I followed

his tracks to where I had shot the second time and could tell I had hit him again. I looked at my watch. It was 3:35, getting dark, and still snowing hard. I wished I could wait awhile before starting after him again, but knew that if I didn't get him pretty quick, the way it was snowing, I probably wouldn't even be able to find him the next morning.

I hadn't followed him more than a hundred yards in the thick stuff, when he jumped up right in front of me and took off. I got off a shot but appeared to miss. I kept right after his tracks. He crossed a small stream and started up a steep hillside. After a few yards he turned out along the hill, then after another 50 yards or so he headed downhill. I knew that by now he was in bad shape. I caught my wind and started down after him. I was sure he would be down in the stream.

When I reached the bank of the stream, no buck, I couldn't see him anywhere. There was a lot of sign where he entered the stream, but I couldn't see where he had left the water, nor could I see him anywhere in the creek. I must have had a very puzzled look on my face. Looking around, I saw a fairly large boulder about 20 feet upstream. I took another look at it. Out of there he came, water and snow flying. The water was around a foot and a half deep alongside the rock. That's where he had been lying. Just as he hit the opposite shore, I shot him through the neck. He dropped on his belly with his head stretched out in the snow. I watched for a few minutes, maybe only a few seconds, to make sure he was down for good. I waded across to him and discovered that my spike was really a 4-point. The main spikes were about seven inches long. Each spike had a point about an inch long, down close to the head. I'll never be able to brag on the size of those points.

I field-dressed and tagged him. It was 13 minutes to 5 (quitting time





**THE TREES WERE LOADED WITH SNOW, and when I moved into the thicket I spotted a deer under a crab apple tree. He took off. . . .**

then). It was then that I realized I was really a tired, happy hunter. I looped a rope around his antlers and started dragging him out. It was getting very dark and the snow was so deep I could hardly drag him. I sweated, puffed, and had to rest every little bit.

I don't know how many miles I traveled that afternoon, but where I killed him was approximately three miles from my father's farm. I kept struggling along, resting every little bit, until I was only a short mile from the house. I decided to leave my buck while I went for help. Also, I was pooped.

No one was surprised when I showed up and said I needed help to get my buck in, because knowing me, when I didn't show up by 5 o'clock they figured I had got one. My brother helped me get him. He weighed 130

pounds field-dressed and was as good as any venison I have ever eaten. Later that evening, Dad said maybe I wasn't so crazy to go.

No, Dad, wherever you are, I wasn't crazy. Every time I look at that little 4-point rack I remember how I found him by myself, tracked him, with a lucky shot slowed him, and finally tracked and got him. Me against him, that's how it was, and that's what I take pride in.

My only regret is that I didn't kill clean with that first shot. I hate to make anything suffer. Truthfully, I get no thrill out of killing. It's the hunt, the stalking, the tracking, the outwitting, the being outwitted, and most of all the just being out-of-doors that I love and get a wonderful feeling from.

So, little 4-pointer, you are a big memory in my little trophy room. . . .

## MORE THAN GAME

By Edward T. Reed



**STATE GAME LANDS** provide opportunity for more than just hunting. For instance, bird banding.

**T**HE CITIZENS OF Pennsylvania have access to over 1,100,000 acres of State Game Lands, but use these areas during only an amazingly short portion of the year—with the greatest concentrated use occurring on six to eight autumn Saturdays. In addition, many hunters hang up their shotguns at the end of November, clean their deer rifles by Christmas, and prepare to settle down to a long winter of dreaming about future hunting or reminiscing about past successes. During this period of dormancy they naturally lose contact with their favorite hunting spots.

So, the question is quite clear. How can people who enjoy being outdoors, and have access to so much land, allow themselves to sit idle while so much well managed wildlife area lies void of human use? Ironically, the same person who complains that he can't get the "true feel" of nature

during the hunting season, due to the large number of hunters, will recline and grumble about it while his favorite hunting area lies quiet and relieved of all the disturbing hustle of the fall season. This period, January to June, is an excellent time for sportsmen to gain experience and understanding in the ways of all wildlife.

More contact with the area one hunts can also bring, in addition to exercise and mental relaxation, some unexpected rewards in future forays into the hunting world. Searching for birds during the off season is one way that is bound to increase one's knowledge of the habits and distribution of game hunted in the fall.

Allow me to relate a personal example. Each year I make numerous visits to a State Game Land in Lehigh County in search of bird life. After hiking over a certain trail dozens of times during the past years, I paused



one day among some rocks and, while resting, the thought suddenly struck me that a deer wanting to cross the mountain in this area could accomplish it most easily, and with the greatest safety, by coming up and through this narrow pass.

I followed through on my reasoning—not an easy decision because it meant abandoning a stand that had produced shooting on opening day for the previous three seasons. Nevertheless, the opening of the 1970 antlered deer season found me standing at the top of the ridge straining my eyes to see as far as possible into the early morning fog and darkness. It was an eerie sort of morning, as the wind would periodically wisk the fog away and just as unexpectedly return it minutes later.

As hunting pressure began to increase in the valley my faith in my strategy weakened. But at 7:45 movement from below announced the arrival of two does which hurriedly jogged past within feet of me. No sooner had the does disappeared into the brush than a fine 8-point buck came climbing confidently up the steep trail. A neck shot from my 308 downed the deer.

As I dragged my trophy out of the woods my mind reflected on the vast number of hunters whose experiences on Game Lands end with their removing of harvested game. They leave behind a surprising assortment of other living things. Let us consider in more detail some of the little-utilized

extra wildlife on much of this public hunting land. Permit me to focus our attention on State Game Land 205 as a typical example of land incompletely used by its owners.

Beginning with the opening of dove season in September, and extending to the end of the small game season, SGL 205 is the center of activity for hundreds of sportsmen. Lying in predominately agricultural Lehigh County, this tract is in a part of the Commonwealth noted for its high concentration of both people and ring-necked pheasants. This combination makes 205 a very busy piece of land during the autumn months.

### **Many Non-Game Species**

Having grown up in Allentown, I spent quite a few days lugging a shotgun up and down the steeply rolling hills of 205. I noticed quickly that not only was this area an excellent home for game animals, but it also appeared to offer habitats suitable to a wide variety of non-game species. An interest in all types of wildlife prompted me to compile a list of birds, game or non-game that frequented this area. This was done in an attempt to discover what species were present and to compare the relative abundance of each species. Or in more practical terms, what does this area offer the public besides a bountiful supply of game?

The "off season" for hunters offered a peaceful solitude during the winter and spring months which I utilized as my period of investigation of bird life. It was no surprise that I found it in abundance and great variety.

A composite list revealed 94 different species, representing 73 genera, 28 families, and 9 orders. The birds ranged from the common species, red-winged blackbirds, song sparrows, pheasants and numerous other frequently sighted birds, to some less common species such as the osprey, water pipit, great blue heron, rough-legged hawk, blue-winged warbler,

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TABLE 1

The Distribution of Observation Periods During the Winter and Spring of 1969

Month	Corn-Brush	Hardwood- Brush	Pine-Brush	Orchard	Monthly Total
January	3	2	2	1	8
February	1	—	—	—	1
March	2	4	2	1	9
April	4	3	—	—	7
May	2	2	1	—	5
Area Total	12	11	5	2	

and red-headed woodpecker. The most unusual bird recorded was a Hammond's flycatcher seen by Don Heintzman and myself on December 23, 1966.

Since SGL 205 is managed for wildlife, it is a well organized patchwork of diversified habitats. This fact provided an excellent opportunity, that I couldn't allow to slip by, to compare the winter and spring utilization of several typical habitat types by the numerous birds common to this area. So, during the winter and spring of 1969 I attempted to quantitatively compare the use of four selected habitats.

#### Habitat Areas

*Corn-Brush*—The majority of this area is covered with cultivated crops such as corn or wheat. The fields are divided by wide strips of multiflora rose mixed with a variety of grasses, shrubs, and small trees. Some portions of these strips contain mature deciduous trees. In addition, several acres lie in a depression which holds shallow pools of water during wet periods.

*Orchard*—The orchard is covered with tall grasses and old apple trees. Scattered among the grasses and trees are small clumps of staghorn sumac.

*Hardwood-Brush*—This area includes a valley floor and a wooded hillside. In the valley is a narrow creek and a small pond. The level portion is covered with a mixture of grasses,

briars, and small herbaceous plants. A few large deciduous trees and a small stand of Norway spruce are also found in the valley. The hillside is covered with mature and young hardwoods.

*Pine-Brush*—The pine-brush area is topographically similar to the hardwood-brush area except that a medium-size stream flows through the valley, and instead of hardwoods, the hillside is covered by a wide strip of Virginia pine and another strip of red pine.

#### Habitat Comparison

In an attempt to quantitatively compare the four selected habitats, the average number of species per "observation period" was computed. An observation period refers to three to four hours spent in search of birds. Table I illustrates the distribution of observation periods by month and area during 1969.

The data (Table 2) indicate that the corn-brush habitat holds the greatest variety of birds during winter and spring. The hardwood-brush, pine-brush, and orchard contain, in that order, a decreasing amount of variety.

The low average of the orchard and pine-brush areas could possibly be in direct correlation with the small number of observation periods recorded for these areas. The averages for the pine-brush area (2.5, 2.5, and 8.0) seem to indicate a possible bias in



TABLE 2

The Average Number of Species Recorded Per Observation Period  
During the Winter and Spring of 1969

Month	Corn-Brush	Hardwood- Brush	Pine-Brush	Orchard
January	7.7	3.5	2.5	3.0
February	7.0	—	—	—
March	6.5	6.3	2.5	3.0
April	12.5	6.3	—	—
May	13.5	4.5	8.0	—
Area Average	9.4	5.2	4.3	3.0

accord with the low number of observation periods. However, the observation periods recorded in the orchard since the investigation (September 14, 1969—4 species; June 14, 1970—10 species), taking into consideration the seasonal differences, support the conclusion that the orchard contains the least amount of variety of the four sampled areas.

The extremes between the corn-brush area with an average of 9.4 species per observation period, and the orchard with 3.0 species per observation period, clearly illustrates the “edge-effect” or ecotone. An ecotone is a place where two wildlife communities meet and blend together. An ecotone normally contains species from both communities. For example, if a grass field is suitable to 10 species of birds, and a bordering forest suitable to 15 species, the edge might be acceptable to five field species, eight forest species, and five that prefer only

an ecotone habitat or a total of 18 different species, a significantly greater number than found in either the field or the forest.

The corn-brush area with its long rows of multiflora rose and patches of brush contains much more ecotone type habitat than the other three, thus it is understandable that it holds a greater diversity of bird species. Therefore, a person searching for birds would be considerably more successful if he concentrated along the edge of a particular habitat.

So, as you can see brief trips afield during the entire year can open new doors leading to a fascinating variety of wildlife. Just imagine how lucky is the man who can feel as much of a thrilling sensation from the sight of a colorful little song bird as from a trophy game animal. Pennsylvania offers him thousands of thrilling experiences to enjoy while his less fortunate buddies ignore a little utilized treasure.

### Showoff

The colorful male shoveller sports a green head, chestnut flanks and a black rump, with all three parts distinctly separated by a glistening white border.

### Gets the Job Done

The snowshoe hare changes the color of its fur by shedding the old coat and growing a new one each spring and fall.



**I WATCHED THE GRAY RACE TO the heights and launch his death-defying leaps. At one, there was a loud report as a dead branch broke and my acrobatic friend rode it to the ground!**

*Sometimes It Pays to Relax and Look Back to Some . . .*

## *Funnies in the Field*

**By R. Parish**

**H**AVING SPENT most of my life afield, I have come to the realization that even in nature existence is composed of a blend of tragedy and humor. My life has been enriched by observing the humorous events that have befallen some of the wild creatures. I'd like to share some with you.

One sun-bathed autumn morning I was hiking amid the Pennsylvania hardwoods on no particular mission. The foliage was in full color and I sat down, leaned back against a big maple and proceeded to soak in both sunshine and landscape. As I sat there

motionless, I was soon joined by several gray squirrels, and one hyperactive rascal soon became my favorite. He scurried among the leaves where he dug industriously. Occasionally he'd sit erect and look about, then dart to a nearby tree, flash onto it, reverse himself, stretch to full length and bark furiously. I watched him race to the heights where he'd launch his death-defying leaps to adjoining branches. Finally, he crouched on a limb and propelled himself toward a whitened snag on a distant tree. To my amazement and amusement there



was a loud report as the dead branch broke and my acrobatic friend rode it to the ground some 40 feet below. I thought surely he'd be killed, but he leaped up and with bushy tail streaming ran chattering into a nearby swamp. I wish I knew what he was saying; but it may well have been unprintable.

That was the first time I ever saw a squirrel fall. But I guess the law of averages prevails. Not long ago I saw the same scene more or less duplicated. This time two red squirrels were pursuing one another amid the branches of a lofty maple. In passion or anger, I couldn't hazard a guess. In any event, one leaped and missed his limb and sailed into the river. The last I saw of him he was a sorry bedraggled sight, with his enthusiasm for love or combat considerably dampened.

#### Chaplin a Second-Rater

One winter's day when most intelligent beings, human or wild, were indoors, I had the opportunity to watch an event that would make Charlie Chaplin look like a second-rater. It was a crisp winter day and geese were still legal and some moving water was still free of ice. However, the lake I was approaching was frozen and the sun was beaming upon it. Suddenly, I saw a lone honker circling, so I knelt in some brush. He put on his winged brakes and came on in. To his astonishment, he did not splash down in a soft landing. He lit upon his hinder parts and began to slide. He tumbled, he flapped. He gave forth with goose curses. His webbed feet went in all directions. First he'd topple forward; then he'd regain his footing to sit down. Finally he slithered onto some rough ice where he got traction and departed. As he became a speck in the distance I looked at my idle scatter gun and wondered how anyone would ever have had the heart to end a comedy like that.

I once ran an extensive trapline along a river. At one set I had put out a large trap and as I approached it I could see it was sprung. I hadn't caught the culprit but I had neatly severed his tail. It lay alone and forlorn on the pan of that huge trap. Somewhere a mouse is probably telling anyone who will listen how he became an amputee.

Once upon a time I had a kid brother who went wrong (he bought a sport shop up at Volant). But this is beside the point. As a kid he sadly lacked the very fundamentals of sportsmanship. He was, for instance, especially reluctant to shoot at running rabbits. Said he might miss them. One day when snow lay deep, I had a fiendish idea. I had dressed a bunny the day before so I had the main ingredients for drama—one rabbit head from a cottontail. I went behind our house and cut a stick, placed the head on one end and jammed the other into the ground. Then I carefully arranged grass and sticks about until I had a setting bunny in his form. I told my brother we had better hunt the swamp this afternoon, and as we



**THE OLD BROOKLYN DODGERS** didn't have a thing on me. The squirrel hit me square on the head. If the shot hadn't done him in, my hard skull surely would have.

plodded through the snow I said, "There sits one." Immediately he wanted to shoot its head off and he did. Then I proceeded to chew him out for shooting it so hard that nothing was left, which was indeed the case. Later after I revealed my perfidy he became a true believer and I'm sure he remembers the last sitting rabbit he ever shot. Eh, Jim?

### **Underdog's Day**

Ever a source of amusement is the sight of birds of prey being harassed by smaller birds. I expect every underdog's day is brightened when he sees a hawk or owl fleeing frantically as his tiny tormenter dives on him and zips away after relieving the predator of a few feathers or pecking his head for him.

One fine day when the marshes were again welcoming spring, I observed an unusual set of antagonists. I was watching a red-winged blackbird as it hovered a few inches above the marsh grass. Suddenly a colorful shape leaped out of the cover and viciously struck at the redwing with his curved beak. To my amazement, I saw that the two opponents were a bit over-matched. I was witnessing a scrap between a blackbird and a ring-necked pheasant. They continued this leaping and pecking for several minutes until they apparently tired of the stalemate and went their separate ways.

One crisp autumn day when the woods were resplendent in their gala colors, I was hunting squirrels. Stealthily entering a woodlot, I heard the staccato bark of a bushytail. I selected a tree to lean against. The sun was warm and before long its pleasant heat had me nodding. Suddenly I

snapped awake as I heard the bark of my quarry nearby. Slowly swiveling my head I tried to locate him. Then it came again, almost in my ear. Looking up frantically, I saw a huge squirrel staring down the trunk directly overhead. I twisted around and shot up the tree and as he tumbled amid a shower of bark I realized I wasn't going to be able to get away. The old Brooklyn Dodgers didn't have a thing on me for the squirrel hit me square on the head. If the shot hadn't done him in, my hard skull surely would have.

One gloomy fall day I was trudging through the dense cover above Slippery Rock Creek in search of grouse. I can never say enough in praise of this wily seoundrel. About the best I can hope for with him is to shoot where he ain't and pray. I manage a few this way but the times he has caught me flat-footed are without number. Anyway, this particular day was overcast and among the dense hemlocks and towering hardwoods visibility was poor. But any crack at Mr. Pat is time well spent in my book, so I was glad to be in the woods. I rounded a great mossy boulder, heard the roar of wings, and swung around frantically, trying to locate this brown bomber. As I swiftly scanned the area I became aware of where he was and where he came from. The place he apparently came from was atop a towering hemlock, and the where he was, was about one foot over my head. By the time I untangled my feet and unwound from my pretzel stance the grouse was a fading figure in the distance. As he disappeared I could have sworn I heard him laugh, so I joined him.

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### **Sees It All**

The Arctic tern is the champion of migrators, nesting in the Arctic and spending its summers near Antarctica.



# *Pulling the Pain From Public Speaking*

By J. David Truby



**TRY TO GET INVITED TO RADIO and TV talk shows. Sometime ago, the hostess of such a TV show gave Truby the chance to describe sportsmen's activities.**

**H**AVE YOU EVER sat tight-lipped, fists-clenched, and closed-minded while an anti-gun addict turned a whole audience, including your wife, against you by the grace of his beautiful—but erroneous—rhetoric?

Unclinch your fists, loosen up your vocal chords, and get ready to talk back.

"Me, a speaker? Your powder's all wet!" you say.

"Not so," says I.

Taking 10 to 15 minutes to read and digest this article can turn you into the Charles Atlas of the Speaker's Table. As a fellow hunter, sportsman, and gun collector, I urge you to meet me at the speakers' dais, joining voices to allow us to keep our guns, free from registration and politics.

It doesn't hurt to make speeches. Honest. If you've been turning down

invitations to bat the banquet buns around the table, take heart, this article is for you!

This article is written to help you sell hunting, yourself, and the rest of us gun nuts by going out and talking about sportsmanship, conservation, guns, and wildlife service. It's an article about one of the most vital and effective sales media known—on-the-spot public speaking. And, you can do it. No kidding!

Read this article. Learn the practical ground rules, and you'll never again have to fear a speaking invitation. Armed with these suggestions, you can even go out and actively solicit speaking engagements. Whether you speak to sportsmen's clubs, civic groups, housewives, teachers, businessmen, students, or legislators, this article will lead the way to your being

an effective public speaker. And, whether you know it or not, that's influence for our side.

There are literally hundreds of books telling you how to be a better speaker, and they all mean well. However, it is possible to boil all of that information into six steps which will serve as a road map to carry you to success as a speaker. These six steps will keep you on the turnpike to successful, interesting speaking, and off those dull, bumpy backroads that shake loose your audience.

This outline will tell you what to say, in what order, and to whom. It will help you write your speech and to deliver it, to any audience.

Before you start, don't forget about publicity for your talk. Write a brief, newsy announcement telling the "what, where, when, who, why, and how" of your talk and be certain all newspapers and radio stations get a copy about 10 days before you are to speak. Don't forget publicity.

Now, to the six suggestions.

### **1. Command the Attention of Your Audience!**

To be an effective speaker, you must have the *attention* and *interest* of the audience in you and your speech. To do this, you must set up a pattern of interest in your first sentence. It's important to wake your audience, arouse their interest and curiosity, and get them with you—all in that initial opening statement. It'd be tough to ignore you, if you walked up before your audience of hunters, swept the room with your arm, and announced:

"Every gun owner here must register his ownership of firearms before leaving the hall. Armed authorities are here to register your acknowledgement of ownership. (PAUSE) Does that make you happy? (PAUSE) It could happen. (PAUSE) Now, let me talk about. . . ."

Or invent your own opening. It can be a quote, a startling statement, a

moving story, a rhetorical question, or a famous reference. Use what you wish, but use it forcefully and effectively, for this opening determines how brightly the spotlight of audience interest will shine on the rest of your talk.

### **2. Aim for Your Audience!**

A good speaker will have a tailor-made speech for each particular audience, and will deliver it so each person knows why the topic is important to him. The job in this step is to make your speech the personal concern of every audience member by getting him "personally" involved. In the first example, you gained attention by involving each hunter with the fact that he would have to declare himself and his guns as if he were a criminal. You've waved a very valid red flag in the face of your audience. Now you must use the tone and inflection of your voice to verbally underline the major points of your talk or to emphasize key statements. Each bit of proof you offer to support your key statements must be clear too. This is why preparation and background knowledge are so important. By following this step, you can talk dollars and sense to businessmen about hunter safety courses, game feeding, ecology, or just plain old conservation. You could explain to a teachers' association why it's important to manage the size of various game herds by regulating hunting seasons and kill limits. Or you might simply be spending a half hour or so telling a group of young hunters taking a safety course at the YMCA about the importance of properly caring for their guns.

Through all this, you should not assume your audience knows the central theme of your talk—tell them! Don't go any further in your speech until you make absolutely certain that the audience knows what your central purpose is. For example, suppose you are talking to a gathering of high school newspaper editors to help in a



cooperative program of firearm safety or working with local police. In any case, you need to outline and stress the major points of the message you want to get across to the audience to whom you happen to be delivering the speech. Just *tell* them what you want to say!

Simple? It sure is, but it's also vitally important to the success of a speech. Tie in the rest of your topic with that statement, and make each person realize what you're saying is important. You've got to convince each listener that he has a stake in the topic. Tell your audience how each one can legally and honestly discredit the stupidity of gun registration. If you're talking to legislators, tell them about the folly of bothering sportsmen with laws that criminals will welcome. Tell children about the life and death of firearms safety. Tell women's clubs about the exercise and health of their husband's outdoor hunting hobby. Relate to your audience. And, put that in "second person, singular" . . . or **YOU!** That **YOU** means your audience.

In addition, a successful speaker is a prepared speaker. Preparation doesn't mean hours of library work either. Being prepared means simply that you know your specific topic and content, and are prepared to discuss it fully and intelligently.

### 3. Say What You Mean!

Talk simply and clearly, and stick to your subject. Don't meander off into side issues that allow your audience's mind to wander from involvement in your speech. You can avoid this by carefully outlining your speech so that each new point builds logically and positively on top of the past point.

Talk *with* your audience, not to them. In other words, try to maintain a conversational tone when delivering your talk. Be aware of your audience too. Note audience reactions to various points and appeals in your talk.

Don't avoid the eyes of your audience by looking over their heads. It is



**INVOLVE YOUR AUDIENCE** by asking them questions. Pick out individuals in this case. This is one time when it's polite to point!

important to maintain eye contact with your audience, but don't just stare at one person, as so many beginners do. Let your eyes wander over the entire group, and look each one in the eye.

### 4. Sell Your Service!

To sell your audience on your ideas, you must expand on your central point, present logical and believable proof for your arguments, and persuade the audience that your way is the correct way. You can sell your idea in many ways.

A. *Sell with examples.* Talk about safety-first stories. Tell how a hunter thwarted a holdup. Relate the story of the hunter who turned himself in after a mistaken game kill. Tell your audience about the hunter who did the usual good deed. **GAME NEWS** abounds in these examples every month.

B. *Convince with numbers.* Hunting is safe and fun. Accidents and crimes with firearms are quite low, despite claims that the anti-gun authors would present. Speaking is your chance to speak out — logically — against these fear mongers. Use numbers and statistics, not emotion.

C. *Set yourself up as an authority.*

Use the examples, stories, and numbers to prove your comments and establish yourself as a local authority. You don't have to be a braggart. Just be informed about hunting, conservation, and firearms control—the big three issues of this decade. Pick one of the three or work in all of them. One thing—have answers for the questions. This means backgrounding, i.e., knowing your subject.

Whichever selling “device” you choose for any particular portion of your speech, remember to always use logical, factual proof to support your claims. In summary, when building persuasive power into your talk, remember the simple but powerful advice of Ralph Waldo Emerson, “Nothing astonishes men so much as common sense and plain dealing.”

#### **5. Hit 'em in the Eyes Too!**

Use visual aids when you're speaking. This can be a simple sketch on a blackboard, a flannel board, a sketch pad, a motion picture, slides, or even a home movie. The speaker who combines sight, sound, and motion, is a highly effective salesman. Good speakers use visual aids.

Keep in mind that as you present ideas and persuasion to an audience, members are going to be silently asking you to “Show me!” Visuals will, and you should use them.

#### **6. Move 'em to Action!**

You've got to get your audience to do something with the information you've given them during your speech. You want them to *act* in the way you suggest, whether it's a school board buying your suggestion to run a hunter safety course, setting up a range in the new high school, or talking to individual classes about firearms safety. You may want to talk to Boy Scouts about the same topics. You may want to discuss with the editorial board of your newspaper a local column about outdoors, hunting, or collecting. You could even be asked to show wildlife

slides to the members of the local slide club.

In any of these cases, don't turn away any opportunities to tell our story. To keep silent might cost us the right to hunt and shoot freely. When you're asked—speak. Volunteer!

Whatever the situation, remember you began the talk with a purpose in mind, and this is the time to ask your audience to accomplish that purpose. This final step is the payoff that gets results for you. It's simple and direct. Just tell the audience what you want them to do, specifically, with the information you've given them. You, not the audience, should draw the conclusions, and *you* explain *how* you want them to act. Put your best, inspirational persuasion into this closing statement, so that you not only ask for positive action, but that you get it.

Those are the six simple steps to mastering the science-art of public speaking. With your practice, they will help you become a good speaker.

However, the most basic and universally true principle is that no instructor or textbook can *make* you an effective speaker. All great speakers are truly self-made products of their own hard work, practice and improvement, although the suggestions in this article, properly applied, can make the job of being a speechmaker far easier for you.

That's winning friends and influencing people, which is really what this whole speaking business is all about anyway. Go win friends for hunting yourself, as well as for sportsmen everywhere. Start talking.

### **Moving?**

**Be sure to send change of address to GAME NEWS Circulation Department, P. O. Box 1567, Harrisburg, Pa. 17120. Send both new and old addresses; allow six weeks for processing.**





**IF YOU HAVE THE LANDOWNER'S PERMISSION, getting back into the good dove shooting areas is easy with a four-wheel drive.**

## SELL YOUR WIFE A 4WD

By Wm. Casteel

**I**T'S PRETTY ROUGH to justify spending the money required to buy some of the new recreation vehicles. ATV's and snowmobiles are a lot of fun, but they surely are limited in utility. However, there is one vehicle which is of value to the hunter and can serve the entire family, year round. That is the four-wheel-drive car or truck.

Women tend to think of 4WD cars as cold, rough, and dirty. Some are that, but today you can usually find one that will suit both of you.

As a hunting vehicle, a 4WD is hard to beat. Its traction is fantastic, and traction plus ground clearance is the name of the game in rough country and snow.

Traction also spells safety. A 4WD on ice- or snow-covered streets can maneuver up and down grades where other vehicles are helpless. Not only do you have the ability to avoid jam-ups, you have better steering control.

There is a lot of difference between trying to push unpowered front wheels into a slippery turn and pulling those wheels through that turn under their own power. If forced off the road into a snow bank, the 4WD can usually pull itself back onto the cleared part. Chains are rarely needed. This means the agony of dragging the dirty rusted things out of a frozen trunk while dressed for a church social is something the woman with a 4WD does not face.

These vehicles are increasing in popularity at a tremendous rate, and rightfully so. They can pack you and your gear into remote areas using the most primitive of tracks. They can carry a camper or pull a trailer into where the fun is. They cruise the highway at good speed or take you down a soft beach to the best surf fishing. Yet they don't sit in the backyard under a tarp in the off season. They can plow your lane, haul the

kids to the thousand places kids go, tote the groceries, and get you to the station on the morning of the big snowstorm.

Of course, you don't get all of this for nothing. You must sacrifice some things, but today you can choose just about any point of compromise between luxurious comfort and out and out cobby boondocker.

Pick-up trucks with four-wheel drive make good hunting vehicles, and are especially attractive to farming families, contractors and others who must haul a lot of material. All of that cargo space is just as handy on a hunting trip as it is at work.

Station wagons are more expensive than most other four-wheel-drive cars, but are a good choice for the town-based sportsman who depends on the wife to do most of the family chauffeuring. They are lower, quiet, and comfortable. They have more options available to make them acceptable to the ladies. A good all around car.

Caravans are also available with four-wheel drive and are fine for large family groups. They can carry a lot of tent camping equipment and are probably the best bet for pulling a big camping trailer. They are not so posh as the station wagon.



**EVEN HUNTERS WHO don't have 4WD's are glad to see them at times—when their own vehicles are stuck, as here, for instance.**

The upcoming all-wheel drive seems to be the short wheelbase car built on a pick-up frame. Patterned after the original Land Rover, some of these are the Toyota Land Cruiser, the Chevy Blazer and the similar job by GMC, the Ford Bronco, the International Scout and the now discontinued Nissan Patrol.

These cars will get through a lot of snow because they have a lot of ground clearance. All have short turning steering systems and are very agile. Some are available with really fancy interiors. They have some shortcomings, such as the lack of luggage space and the high step-up, which women resent as it often makes life difficult for them.

#### **The Original—and Good**

The Universal Jeep doesn't seem to fit any of these classes. It was the original, and if it wasn't good, it would have died long ago. Of course, the Jeep, like a Winchester 94, has a lot of romantic nostalgia going for it. But a civilian Jeep of today is a pretty ritzy relative of the one that you drove into Paris during WWII. It has a choice of engines, better suspension, and seats that are comfortable, and it still has the same nimble handling of its ancestors.

Options are important for these vehicles, for on many the basic vehicle is pretty darn bare. Some options are useful and some are just expensive. Probably the most common option is also one of the cheapest. This is the free-wheeling hubs for the front end. You just turn a knob on each front wheel to disconnect the entire front drive train. This saves a great deal of wear on moving parts when driving on hard surface roads. It makes steering easier and improves fuel economy somewhat.

Automatic transmissions are available on some of these cars, also four-speed gear boxes, which are useful if you have the smaller engines.

A reasonably wide range of engines



is available. Keep in mind the fact that a powerful engine is seldom utilized in rough country, but power is needed for high speed highway travel or for pulling a trailer.

Tops are variable. You can have a soft top, half cab or full cab on most. A convertible is nice in warm country, but a full metal cab is a real joy when the thermometer crawls down and that hard snow whips around at 40 miles per hour. Half cabs are the warmest of all but limit you to three people. The little truck bed left at the rear is inadequate for most purposes.

Limited slip differentials are available and useful. After all, it is hard to have too much traction.

Winches can be had for nearly all of these, and do a good job in emergency situations. However, they are expensive and hard to justify unless you are a real kamikaze woods runner.

Oversize tires add little to the cost and give you longer wear. They increase your ground clearance and flotation, both of which are important, but they do limit your turning radius.

Snow plows are fine for country dwellers, but for the usual short driveway are not worth the several hundred dollar investment, unless you are going into the snow removal business.

Should you buy new or used? That's a tough question, but keep in mind the fact that the styling on these cars

is not changed often, and the resale value stays up. These vehicles rust out like practically all cars, but people will spend money to repair one, long after a two-wheel-drive job of equal vintage would have been scrapped.

If you are looking for a used 4WD, use all the common sense rules for checking any used car, plus a few more. Be sure that all tires are the same size. If they are not, the drive train can be damaged. Pay special attention to the front wheel drive train. Check it for wear and looseness. These are expensive parts to replace. Be careful of Jeeps that have been converted to V-8 engines. The drive train must be beefed up all the way through to stand the extra power. Surplus military Jeeps seem to be a scarce item. The few that the government does dispose of in this country are nearly always cannibalized and the missing parts are often hard to replace. When looking up 4WD cars in the want-ads, be sure to check the truck section. There seems to be some confusion as to whether some of these vehicles are cars or trucks.

If you do much hunting, you would do well to consider one of these outfits when you are in need of another vehicle. They can add to your sport pleasure as well as increase the reliability of your day to day transportation needs.

**THE 4WD MADE its reputation during WWII when the original Jeep became popular. This one, assigned to the 89th Cml. Mortar Bttn., was photographed near Ickern, Germany, in the spring of 1945. The driver was Pfc. Bob Houston, of Philadelphia; sleeping, Pfc. Bob Bell, now GAME NEWS editor.**





## Scouts

**E**VERY YEAR IN February from the Pittsburgh and northwestern parts of the state, a few hardy fellows face the winter nights in hunting camps made available during daylight hours, a great opportunity for our whitetails who cooperate fully with the hunters. This year the outing







## Browse

A thousand Boy Scouts  
 went to the northcentral  
 region to cut browse for  
 their sleeping bags and  
 must take advantage of  
 sportsmen. During the  
 festival food is made avail-  
 able of these young men,  
 of the Game Commis-  
 sion on February 18-20.





## FIELD NOTES



### Keeping Track of Things

**YORK COUNTY**—During November I had two men come to my headquarters within the hour after I picked up two road-killed deer. They both wanted to see the deer to find out if it was the one they had been watching and were going to go hunting for the first day of the season. Both deer had nice antlers, but only one of the men was disappointed to find out it was the deer he had been watching.—District Game Protector R. L. Yeakel, Red Lion.



### Well, He Was Hungry

**MIFFLIN COUNTY**—One morning I observed a young boy punishing his pet dog. I knew the boy, and knew that he thought a lot of his pet, so I asked why he was doing that. He informed me that his dog had eaten his other pet, a grasshopper. — District Game Protector J. D. Moyle, McVeytown.

### Blasé? Not Us!

**CLARION-JEFFERSON COUNTIES**—After hearing some of the bear stories, I am convinced that many hunters get more excited when they see a bear than any other Pennsylvania wildlife. One fellow after shooting at a bear couldn't talk but just pointed, finally saying, "He sure was a big one!" Another hunter missed one and trailed it so far that when he came out on a road he couldn't tell where he had parked his car. And a policeman who had very good equipment said a bear walked right up to him and he took steady aim and fired. Nobody could understand what happened, but the result was—no blood, no hair, and no bear.—Land Manager L. L. Harshbarger, Knox.

### Unlucky Doe

**VENANGO COUNTY**—A hunter turned over to me a live doe which he walked up on during the buck season. We determined it was totally blind, an apparent victim of a highway/vehicle accident. It undoubtedly would have starved to death in the wild due to its condition.—District Game Protector L. C. Yahner, Franklin.

### Just Relaxin'

**LANCASTER COUNTY**—On November 22 I was quite surprised to see two American egrets on a pond. This is the latest that I have ever seen these birds in this area.—District Game Protector J. P. Eicholtz, Strasburg.





### The Female of the Species

**NORTHWEST DIVISION WIDE**—A 106-lb. attractive female hunter presented a very nice 122-lb. 8-point buck for examination at the Clarion deer check station on opening day. She was beaming with pride. Her husband had gone "with the boys" to their hunting camp. She got her trophy quite near home. When asked how she got the deer out of the woods and onto the truck, she replied, "I blew on this whistle until someone came to help me." She was wearing her husband's blaze orange coveralls, making quite a striking picture.—CIA R. D. Parlanman, Franklin.

### Accommodating Fellows

**VENANGO COUNTY**—While resurfacing sidewalks at the Venango Human Services building complex, a tunnel was discovered leading to a chipmunk nest beneath a stone porch of the building. Since resurfacing the sidewalk would have cut off the entrance to the nest, workmen placed a plastic pipe along the foundation before pouring the concrete. Now there can be seen a plastic pipe sticking out of the sidewalk leading to the chipmunk nest.—District Game Protector L. C. Yahner, Franklin.

### Yippee!

**BLAIR COUNTY**—On night patrol recently, I received a call for assistance from Deputy Lantz Hoffman. Arriving at the scene I found a deputy turned cowboy. Lantz was attempting to lasso a young calf which was running up and down the road in Farm Game Project 212. This in itself provided a good show, but it really got going after he became successful with his lasso and the calf continued running up and down the road, dragging a very surprised deputy with it. After a few choice comments from the deputy, the calf was tied and the owner came to claim it and return it to his barn. I suggest at the next Blair County deputy meeting we include some training in calf roping.—District Game Protector H. L. Harshaw, Hollidaysburg.



### Could Be

**LYCOMING COUNTY**—While checking hunters each year, there are always some who complain about the lack of game, while others report finding a good supply. I often wonder if the wildlife population fluctuates in direct relation to the amount of effort put forth by individual hunters in finding it.—Land Manager D. E. Watson, Williamsport.



### Music Hath Charms?

**HUNTINGDON COUNTY**—While on foot patrol near the crest of Stone Mountain, Deputy Ray Crownover observed a brightly clad hunter take a stand approximately 60 yards below him. Shortly thereafter the sound of country music broke the stillness, causing Ray to think that perhaps the previous several weeks of sleepless night work was getting to him. Sure enough, after glassing the hunter with binoculars, Ray spotted a transistor radio. Remaining motionless for a period of time, Deputy Crownover saw three antlerless deer approach between him and the other hunter, cock their ears and move to within 30 yards of the music source, survey the situation for several minutes and then move quietly on. Needless to say, the "Grand Ole Opry" hunter never sighted the deer or Ray.—District Game Protector R. D. Furry, Huntingdon.

### A Lengthy Challenge

**YORK COUNTY**—Edward Wire, of Thomasville, thinks we ought to run a survey on the length of ring-necked pheasant tails. He feels he had a trophy with a 26-inch feather. Can anyone top that?—District Game Protector G. J. Martin, York.

### Oughta Keep Quiet Sometimes

**CAMBRIA COUNTY**—The following story was related to Deputy Hodgson. While Raymond Hanlon, a contractor, was doing some work at Laurel Run Sportsmen's Club, he obtained a mounted elk head that was to be discarded. He decided to take it home at lunch time. Upon arriving home, Hanlon's elderly mother saw the head in the truck. When asked where it came from, Hanlon said he had hit a deer on the road and it was so big he could only pick up the head. That evening after work he had the unfortunate experience of hitting a deer (a big one) and did over \$700 damage to his pickup truck.—District Game Protector D. W. Jenkins, Ebensburg.

### Now He Believes

**SCHUYLKILL COUNTY**—Dressed in hunting clothes, I approached a group of hunters who I suspected had shot a snow goose that was floating on the water in front of them. One recognized me as the warden who had checked them two days earlier, thus ruining any opportunity I had of apprehending the violator. While talking with him, a loon took flight from the middle of the dam and flew towards us. He stated, "Here comes a goose." I said, "No, it's a loon." He said it looked like a goose. Again I stated it was a loon. At this time he had the shotgun halfway to his shoulder but refrained from shooting. His movement turned the loon, which flew to the other shore where another hunter spooked it back to us. As it flew within 30 yards of us, he exclaimed, "It's a goose!" Before I could utter another word, his shotgun cracked and the loon fell into the water. His buddy came running over and told him that was a great shot. He replied, "Yeh, great, the Game Warden just took my license." — District Game Protector S. L. Opct, Homctown, Tamaqua.



## The Right Approach

**CLARION COUNTY** — In recent years a rather large tract of land in this county has been closed to hunting due to inconsiderate hunters. After talking to the owners of the land, with the assistance of a group of organized sportsmen, they finally agreed to open the land to hunting as long as the hunters behaved themselves. On the first day of buck season, Deputy Logue was on patrol near the area and was hailed by some local sportsmen who had witnessed a violation. If the sportsmen would rally and police their own ranks like this more often, there would be far more land open to public hunting.—District Game Protector J. G. Bowers, Knox.

## Not Quite That Organized

**HUNTINGDON COUNTY** — Sunday before bear season, I received a phone call from a young chap who asked if this was the year for bear to have cubs. He stated he had read that cub bears were born every two years and thought all were born the same year. He felt if this were the case, his chances of a mistake kill were not as great.—District Game Protector C. E. James, Orbisonia.

## How Dedicated Can You Get?

**BUTLER COUNTY** — One of my younger deputies really has a problem. It seems that his wife had a nice quiet evening planned. She mentioned this to her husband and he said, "I don't know, honey, I have to check with my District Game Protector to see if he wants me to go on night patrol before we can make any plans."—District Game Protector J. D. Swigart, Butler.

## Something to Keep in Mind

**FOREST COUNTY** — During the first week of archery season, Special Fish Warden Richard Kenter was watching an albino deer near Kellettville, when a car came along and a man jumped out and shot at the white deer. Later when the man paid his fine he said he had often read that the Indians would never kill a white deer as it would bring bad luck to the hunter for the rest of his life. He believes this must be true, as it cost him \$25 for shooting within 25 yards of the highway.—District Game Protector E. L. Taylor, Tionesta.



## On-the-Ball Beagle

**LUZERNE COUNTY**—Deputy Ray Harned was checking two hunters in Huntington Mills area on opening day of small game season. While the hunters were eating lunch in a parking area, Ray noticed their beagle was going out and bringing in lunch wrappers and laying them in front of the owner of the dog. Maybe he felt he should clean up the litter that other hunters left so that the landowner would not close the land for his sport. District Game Protector E. R. Gdosky, Dallas.

### Accurate Archer

**CLEARFIELD COUNTY**—Deputy Game Protector Donald L. Coulter, of Philipsburg, and some friends spent the week of October 18 camping in Woodward Township and hunting with bows and arrows. In the course of a few days, Don shot a spike buck. Also, by using blunt rubber-tipped arrows, he bagged a grouse which landed in a tree he was sitting in, and to top it off he bagged five squirrels in one day. Just goes to show that dedicated archers as well as dedicated gunners do know their business.—District Game Protector J. R. Furlong, Ramey.



### Rudyard Returns!

#### **MONTOUR COUNTY**—

Of the surrounding counties, I'm not sure,  
But in Northern Northumberland and Montour  
If you should drive o'er the countryside,  
You're bound to pass over a patch of hide  
All that remains—plus the smell—  
Of a little fellow we know so well;  
Soon you'll think it is in the trunk  
Whew! Another road-killed skunk!  
—District Game Protector R. W. Donahoe, Danville.

### Not That Many

**SNYDER COUNTY**—On the first morning of deer season I was standing in a woodland patch. During the first hour and fifteen minutes of the season, I counted 452 shots. I wonder how many bucks were taken with this amount of shooting?—Land Manager I. L. Dodd, Beavertown.

### Details . . . Details

**CLARION COUNTY**—I received a phone call that a bear had been killed by an automobile. I proceeded to the area and found the animal to be the longest-tailed bear I have ever seen. It turned out to be a full grown Shetland pony.—District Game Protector A. N. Pedder, Clarion.

### Just Plain Stupid

**LEBANON COUNTY**—While conducting hunter safety courses, interested adults often stay and usually have some favorable comments afterwards. Perhaps an unfortunate experience would have been prevented if an adult in Heidelberg Township had attended a course earlier. A first-time hunter stumbled and plugged his shotgun with mud. He stopped to unload the gun, open the action and clean it out. When a passing adult asked what he was doing, the youth told him he had to clean the mud out of the barrel. The adult told him to shoot it out. The youth refused to do it, then the know-it-all adult said, "Give it to me." He shot it out. Results—a peeled barrel making the gun inoperable. Fortunately no one was hurt. Perhaps it would have done some good for this adult to attend a hunter safety course.—District Game Protector P. A. Hilbert, Cleona.





# CONSERVATION NEWS

By Ted Godshall

## Should Wildlife Be Fed During Winter?

**E**VERY YEAR WHEN temperatures head for the zero mark or snow begins to pile up, wildlife observers become concerned about the welfare of nature's creatures. One of their primary concerns usually is the availability of food for wildlife.

It is natural that sympathetic humans would want to provide supplementary foods, but the Game Commission cautions that this is seldom necessary and often is undesirable.

Most people fail to realize that wilderness creatures existed for countless centuries without handouts from humans, and would have vanished ages ago had it been necessary for them to receive additional rations during winters. Most wildlife species are extremely hardy, and are more adaptable to severe weather than humans.

Last year there was an abundance of most wildlife foods, and for the most part animals and birds went into this winter in good shape. Many species are now drawing on reservoirs of energy stored up before winter started, and thus far there have been almost no winter losses.

The snow cover was deep in parts of the state a year ago at this time, but some sections of Pennsylvania have had almost no snow to date this year. Cold, unless it is of extreme intensity and duration and accompanied by continuous, high winds, normally has little effect on wildlife. Snow, on the other hand, does affect a few species and their feeding habits.

Such species as rabbits and squir-



PGC Photo by CIA Wes Bower

**MEMBERS OF THE Brush Mountain Club cut browse for deer in Blair County. This activity is of more help to white-tails than other feeding.**

rels have no trouble finding food, even in deep snow, and birds like pheasants, turkeys and grouse are adept at reaching food supplies. Quail are probably most vulnerable, sometimes smothering in snowdrifts.

The Game Commission maintains turkey feeders as needed, and provides corn to supplement the natural diet of these big birds. Many sportsmen also feed turkeys in the winter.

Deer are a somewhat different story. When snow depths are great, white-tails will not move and have died when food was available less than 100 yards away. This would mean that, to be effective, supplementary food would almost have to be placed under the nose of every whitetail—a physical

impossibility from the standpoint of manpower and equipment alone.

Then, too, consider the number of pounds of food required to keep a deer healthy, multiply by the number of deer in the herd, multiply by the number of days involved, multiply by the cost of feed—the figure is economically staggering, and far beyond the limitations of the Game Commission budget.

In addition, sudden changes in food habits can produce unwanted results. To be most effective, there should be some constancy in diet, and a gradual shift is preferable to a quick switch. This means starting a substitute feeding program in the fall, not several weeks after snow accumulates to appreciable depths, and continuing until spring.

Whitetails congregate in “deer yards” when weather conditions become severely unpleasant, quickly eating available browse in the area. Since they will not then move out, it becomes necessary in a winter feeding program to deposit the supplementary feed in the yards. This only serves to compound the problem as unusually heavy concentrations lead to unhealthy stress, disease transmission possibilities, etc.

Some artificial feeding areas are near roads, producing unwanted traffic hazards—whitetails on the highways.

There are emergency or stop-gap measures which can be taken, such as

browse cutting in which the Game Commission is extensively engaged. This makes food available to deer immediately, and helps tide them over critical periods.

The sportsman probably can do more to aid the deer herd with an axe than he can with tons of unnatural food. District Game Protectors and the Game Commission's land managers can assist those who want to get in on the fun of a browse-cutting party. Areas for supervised cutting have been marked on State Forest and State Game Lands.

However, browse cutting is like taking an aspirin to help relieve a headache. It isn't a cure for the problem, nor does it prevent a recurrence of the situation.

The answer lies with population control, and this is what the Game Commission relies on. By keeping the whitetail herd trimmed to the size which the range can support, excessive winter losses can be avoided.

Had hunters not harvested the large number of whitetails taken in the state during recent years, winter losses undoubtedly would have been much greater than they have been. The size of the 1971 harvest will reduce chances for undue losses this winter.

Certainly, some will feel much better if they think they are helping wildlife. However, the Game Commission cautions that winter feeding won't save all the game.

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## **Booklet on the White-Tailed Deer**

All persons interested in deer will find the booklet, “The White-Tailed Deer in Pennsylvania,” of great interest. Written by Stanley E. Forbes, with the assistance of Lincoln M. Lang, Stephen A. Liscinsky and Harvey A. Roberts, all wildlife biologists, this publication gives a great deal of information which formerly was unavailable to the general public. The whitetail's clan, home, enemies, conflicts, benefactors and predicted future are covered. General topics include growth rates, antler development, reproduction, population structures, sex and age ratios, reproduction potential, and similar topics. This 40-page booklet may be ordered from the Pennsylvania Game Commission, P. O. Box 1567, Harrisburg, Pa. 17120. Price is 50 cents delivered.





**T. A. REYNOLDS**



**PAUL GLENNY**

## **Reynolds Retires, Glenn Named Supervisor**

**T**EMPLE A. REYNOLDS, supervisor of the Game Commission's Southeast Division, retired on January 28 after 30 years of service. A member of the third class at the Ross Leffler School of Conservation, Reynolds was a game protector in Luzerne County, conservation information assistant in the Southeast Division, law enforcement assistant in the Northwest Division and supervisor there before taking over the Reading office.

Paul Glenn, assistant superintendent at the training school, has been named to succeed Reynolds. Glenn, a member of the seventh class, has 19 years of Game Commission service. He was a game protector in Dauphin and Adams Counties, CIA in the Southeast Division, and a law enforcement assistant in the Northeast Division and Harrisburg office before taking his recent training school assignment.

## **Pymatuning Waterfowl Records Broken Again**

More hunters utilized the Pymatuning Waterfowl Area in Crawford County in 1971 than ever before, according to Waterfowl Management Agent Ray Sickles. Sportsmen also had a record-breaking year in terms of waterfowl harvest. A total of 4246 shooters used the 40 goose blinds constructed and maintained by the Game Commission, compared to the previous mark of 4042 set in 1970. A record 26,290 hunters applied for the reservations in a drawing conducted in October. In addition, 3414 gunners utilized the controlled duck shooting areas, making a total of 7660 hunters using the Pymatuning areas in 1971. The previous high was 7568 in 1970. Hunters took 2870 geese from the Pymatuning blinds and another 900 were taken outside of the controlled area, for a total of 3770.

# Snowmobile Trails on State Game Lands

The following areas, roads or trails on State Game Lands are open 24 hours per day, January 15 to April 15, for the use of snowmobiles.

## Northcentral Division

Field Division Supervisor R. H. Morningstar  
Box 38, Jersey Shore, Pa. 17740  
Phone: 717-753-5641

SGL 33, Centre County—12 miles. From Route 322 to Township Road T-575.

SGL 93, Clearfield County—5 miles. From Township Road T-408 to a forestry road off the Anderson Creek Road.

SGL 252, Lycoming-Union Counties—20 miles. Located around perimeter of the tract and one across the tract.

## Southcentral Division

Field Division Supervisor W. A. Hodge  
Box 537, RD 1, Huntingdon, Pa. 16652  
Phone: 814-643-1831

SGL 26, Blair County—7.5 miles. Starting at point along Blair County Township Route 07002 where State Game Lands road joins and running generally in a southwesterly direction to State Route 869 in Bedford County, and trail running from an intersection of the previous trail on State Game Lands 26 running north and ending at State Game Lands boundary in Cambria County.

SGL 88, Perry and Juniata Counties—10.5 miles. Trail to run along and on State Game Lands road from State Route 850 to crest of Tuscarora Mountain and then northeast along crest crossing State Route 74 and ending at State Game Lands boundary where there is a turnaround point.

SGL 99, Huntingdon County—7.5 miles. Trail to be along and on State Game Lands

road that starts from State Route 829 between Saltillo and Three Springs traveling in the majority of its length along the crest of Jacks Mountain and terminating at one point where road intersects State Game Lands boundary (turnaround) and at a point along Township Route 365 where State Game Lands boundary crosses same (parking).

## Northeast Division

Field Division Supervisor N. J. Molski  
RD 4, Box 220, Dallas, Pa. 18612  
Phone: 717-675-1143

SGL 12, Bradford-Sullivan Counties—13 miles. Road from storage building on Route 154 east to Sunfish Pond and south of Laquin.

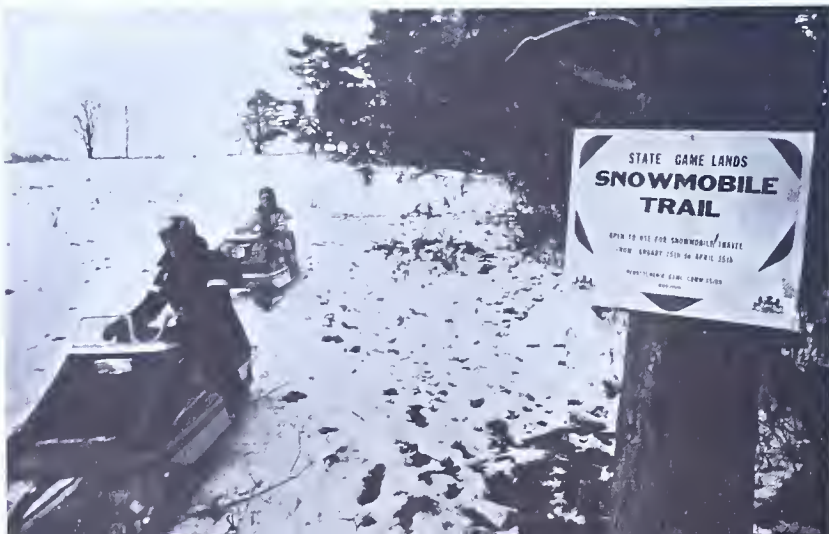
SGL 35, Susquehanna County—3 miles. Rose Hollow Road from Township Road near Corner 98 to State Game Lands line near Township Route 631.

SGL 57, Wyoming-Luzerne Counties—12 miles. Railroad grade from State Game Lands line at Corner 130 up Bowmans Creek to Highway Route 487 at Ricketts Station.

SGL 226, Columbia County—7 miles. Several old log roads that connect with Township Roads and parking lots.

SGL 38, Monroe County—5 miles. From parking lot on Big Pocono Road to State Game Lands line between Corners 24 and 26.

SGL 127, Monroe County—14 miles. Project 500 Road from Route 423 to Township Road at Ells Corner number 1 trail from intersection with Project 500 Road to parking lot at Bradys Lake.





### **Southeast Division**

Field Division Supervisor T. A. Reynolds  
RD 2, Box 418A, Reading, Pa. 19605  
Phone: 215-926-6071

SGL 52, Berks and Lancaster Counties—2 miles. Starting at parking lot on Township Route 888 proceeding in an easterly direction to a fork—right-hand road to stone cabin and turnaround. Left-hand fork proceeding easterly and ending at turnaround adjacent to Turnpike.

SGL 110, Berks County—6.5 miles. Starting at gate and parking area 1 mile north of Shartlesville. Trail will be an existing road—up the mountain 1½ miles to turkey pen and tie into State Forest road down north slope. Game Lands road proceeding east on top of ridge then down mountain on newly constructed road to parking lot at Legislative Route 06030 known as “the mountain road.” Approximately 2 miles west of Hamburg.

SGL 145, Lebanon County—5 miles. Starting at the Pinch Road parking lot, west to the Colbrook Road. From the Colbrook Road west; then north to Pennsylvania Route 241. One route—no turnoffs.

SGL 156, Lancaster County—7 miles. Beginning at the top parking lot adjacent to the Cornwall Lookout Tower, running westward on a Game Commission secondary road for approximately 2 miles; at this point a hard left turn is required and again following Game Commission secondary road for a distance of approximately 5 miles and crossing the PP&L Company and the Denver and Ephrata Telephone Company rights-of-way to the lower parking lot located along Township Road T-562.

SGL 211, Dauphin County—22 miles. Starting at the steel gate at Ellendale east to the Goldmine Road; from the Goldmine Road east to the Lebanon Water Company property. Any turnoffs will be unlawful.

SGL 257, Schuylkill County. Entire area may be utilized, except 2 miles of road open to vehicular traffic by the public.

NOTES: Trails on Game Lands will be marked with a standard symbol statewide—an orange-colored, diamond-shaped marker approximately 5 x 7 inches in size.

Maps of the Game Lands can be purchased from the Game Commission. Survey maps of individual Game Lands, 24 x 36 inches, showing boundary lines, streams, roads, etc., are \$2 each, delivered. Topographical maps of Game Lands, 8½ x 13 inches, are 25 cents, delivered.

### **Northwest Division**

Field Division Supervisor L. E. Sheaffer  
Box 31, Franklin, Pa. 16323  
Phone: 814-432-3187

SGL 29, Warren County—6 miles. Road beginning at Chapman Dam and extending through Game Lands to Game Commission storage building and parking area off Highway Route 337 and trail extending off Chapman Dam road extending through State Game Lands to Allegheny National Forest Road 437.

SGL 63, Clarion County—3 miles. Starting at the intersection of Township Route 416 and Old Farm Road extending east to the vicinity of Old Farm, then south utilizing service road to a point of approximately one-half mile south of Old Buckhorn School Lot, then crossing New York Central Railroad tracks traveling north between railroad and Deer Creek to its termination on Township Route 2424 at Old Wilson Mill Site.

SGL 86, Warren County, 6 miles. Road beginning at Davey Hill gate and parking area along Route T-642 and extending through the Game Lands to Game Commission parking lot at Althom Station along Route T-422.

SGL 143, Warren County, 6 miles. Road beginning at Blue Eye Game Commission parking lot off Highway Route 27 extending through State Game Lands to Spitz Hill Game Commission parking lot along Route T-457.

### **Southwest Division**

Field Division Supervisor G. L. Norris  
339 W. Main Street, Ligonier, Pa. 15658  
Phone: 412-238-9523

SGL 42, Cambria, Somerset, Westmoreland Counties—26.2 miles. Traversing 2 tracts utilizing existing service roads, trails and pipeline rights-of-way with access near the villages of New Florence and Waterford.

SGL 228, Somerset County—approximately 2 miles east of Central City—6.4 miles. Starting at parking lot near the village of Gahagan and traversing the Game Lands in a northeasterly direction to a parking lot on Legislative Route 55130, continuing in the same direction to Legislative Route 55079. Included also in the total distance (6.4 miles) is one spur trail in a southeasterly direction (1.5 miles) and an alternate route off Legislative 55130.



JOHN B. SEDAM

## Minerals Division Chief Retires

John Sedam, of Marysville, who headed the Pennsylvania Game Commission's Division of Minerals since the formation of the unit in 1956, retired on December 31, 1971, after completing almost 36 years of service with the wildlife conservation agency.

Sedam began his career as a game land technician in the old Bureau of Refuges and Lands, with headquarters in Harrisburg. He later worked in game land management, in the Huntingdon office. He returned to Harrisburg as assistant chief of the Land Operations Division, and in 1952 became supervisor of the food and cover section of the Land Utilization Division. He was named chief of the Division of Minerals in 1956.

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### Book Review . . .

## The Upland Shooting Life

The many readers who have enjoyed George Bird Evans' bird hunting articles in GAME NEWS will be glad to know he has now written a book—and a fine one it is. Decades of shooting experience on grouse, woodcock, quail and pheasant, all of it over his own Old Hemlock belton setters, have provided the background for this informative and highly readable book. In scenes that bring with them the color of autumn leaves, the bite of frost, the odor of grapes on the sun-touched hillsides, Evans tells us why he hunts, and where, and how. He writes of sportsmen he has known and of how they affected his views on hunting, dog training and wingshooting techniques, game bird recipes and shooting diaries. But most of all he tells us about the wonderful dogs that made the upland shooting life as he knows it possible. Many of you already are somewhat familiar with the lives of Ruff and Bliss and Shadows and Dixie. When you've read this book you'll feel they're part of your family, just as they are part of George and Kay Evans' family. Anyone whose heart has ever leaped at the thunder of a grouse will devour this book at one sitting. (*The Upland Shooting Life*, by George Bird Evans, Alfred A. Knopf, 501 Madison Avenue, New York City, 1971. 301 pp. plus index, illustrated, \$10.)

### No Wonder He's Always Angry

Unlike other native turtles, the snapper cannot pull its head, legs and tail into its shell.



# **Financial Report for the Fiscal Year**

## **July 1, 1970, to June 30, 1971**

**By Edward T. Durkin, Comptroller**

**T**HE FOLLOWING observations relative to the financial trends of the Pennsylvania Game Commission are presented for your information.

Pennsylvania, which leads the nation in the sale of hunting licenses, again showed an overall increase this year. The increase this year was 31,053 over last year. However, the rate of increase has been decreasing in recent years. Last year the increase was 33,235. Two years prior the increase was 57,574. This would seem to indicate a leveling off of potential hunters in Pennsylvania. On the other hand, operating costs during the last three years increased by approximately three million dollars. This rapid increase in operating costs coupled with the leveling off of revenue resulted in a one-million dollar decrease in the amount available in the Game Fund. This trend, if continued, could soon create serious financial problems. It is obvious that additional revenue or program cutbacks will be necessary.

The increased costs experienced in the past few years resulted from several factors. Inflation contributed to the spiraling cost of goods and services required by the Game Commission. Salaries had to be raised in order to help meet the increased cost of living. Another factor contributing to increased costs is the additional spending of Game Fund monies required for expanded programs. However, the benefits derived from the funds provided by the State and Federal Government for these expanded programs, such as land acquisition and development of additional game lands for future hunting enjoyment, far outweigh these costs.

An additional factor to consider in analyzing future costs is the advent of collective bargaining for State employees. It is estimated that contracts already signed or presently being negotiated will cost the Game Commission an additional one and a half million dollars in the next two years.

The results of the operations of the Pennsylvania Game Commission for the 1970-71 fiscal year are illustrated in the following detailed financial reports and statements.

The Game Law provides for certain funds to be set aside for specific purposes.

Act 271, session of 1949, provided that \$1.25 from each resident hunter's license fee shall be spent for improving and maintaining natural wildlife habitat on land which is available for public hunting. During this fiscal year the minimum to be expended was \$1,312,033.75; the actual expenditures for the above purposes were \$2,591,170.12, or \$1,279,136.37 over the required minimum.

Act 632, session 1955, provided that the sum of \$1 from the sale of each resident and nonresident antlerless deer license shall be used for development and maintenance of deer food and cover on State Game Lands. During this fiscal year the minimum to be expended was \$342,743; the actual amount expended for the above purpose was \$513,609.75, or \$170,866.75 over the required minimum.

The Project 70 Fund, a \$5,000,000 Land Acquisition Project which expired on December 31, 1970, shows approximately 16,934 acres of land acquired at a cost of \$4,676,637.64 as of June 30, 1971.

# PENNSYLVANIA GAME COMMISSION

## FINANCIAL STATEMENT

JUNE 30, 1971

Cash and Investments, June 30, 1970 .....		\$8,716,844.15
Less: Outstanding Obligations, June 30, 1970 .....		
Unpaid Vouchers in Process .....	\$ 85,629.27	
Outstanding Commitments .....	<u>2,891,333.98</u>	
Total Obligations .....		2,976,963.25
AMOUNT AVAILABLE FOR COMMITMENT & EXPENDITURE, JUNE 30, 1970 .....		<u>\$5,739,880.90</u>
RESULTS OF OPERATIONS FOR 1970-71 FISCAL YEAR		
Total Receipts .....	\$11,347,549.91	
Less: Expenditures .....	<u>12,328,411.76</u>	
Less: Increase in Outstanding Commitments .....		
Outstanding Commitments, 6/30/71 .....	\$2,985,152.98	
Outstanding Commitments, 6/30/70 .....	<u>2,891,333.98</u>	<u>93,819.00</u>
NET OPERATING LOSS .....		(\$1,074,680.85)
AMOUNT AVAILABLE FOR COMMITMENT & EXPENDITURE, JUNE 30, 1971 .....		<u>\$4,665,200.05</u>

### GAME COMMISSION REVENUE

Resident Hunters' Licenses .....	\$ 5,111,889.80
Non-Resident Hunters' Licenses .....	2,596,169.63
Federal Aid for Wildlife Restoration and Recreation .....	1,182,901.10
Interest Income .....	506,785.93
Miscellaneous .....	455,424.33
Other Licenses .....	354,218.75
Antlerless Deer Licenses .....	343,116.50
Sale of Publications .....	339,092.97
Game Law Fines .....	268,704.50
Sale of Wood Products .....	189,246.40
TOTAL .....	<u>\$11,347,549.91</u>

### GAME COMMISSION EXPENDITURES BY ORGANIZATIONAL UNIT

Land Management .....	\$ 6,311,826.10
Law Enforcement .....	2,473,619.61
Executive, Accounting and Administration .....	1,263,968.23
Propagation .....	1,051,362.30
Information and Education .....	732,532.72
Research .....	275,499.58
Training School .....	216,030.07
Expenditures from Game Fund by Other State Departments .....	<u>3,573.15</u>
TOTAL .....	<u>\$12,328,411.76</u>

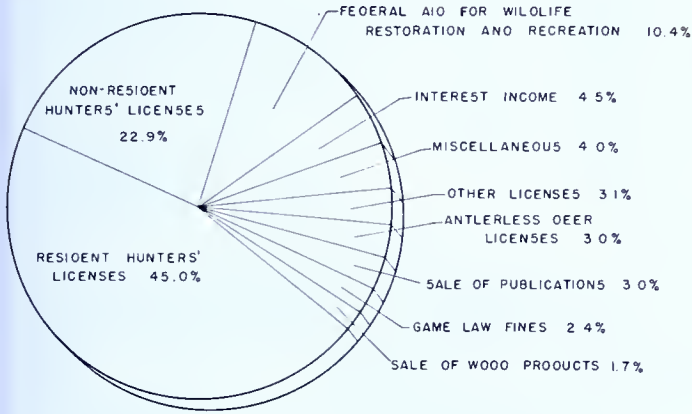
### GAME COMMISSION EXPENDITURES BY OBJECT CLASSIFICATION

Salaries .....	\$ 3,584,564.17
Wages .....	2,655,420.13*
Employee Benefits .....	555,673.44
Supplies and Contracted Services .....	2,816,248.17
Purchase of Motor Vehicles & Farm Equipment .....	708,454.50
Furniture & Fixtures .....	11,267.97
Purchase of Game .....	126,879.75
Land Acquisition .....	1,434,174.05
Building & Structures .....	142,938.01
Non-Structural Improvements .....	10,790.00
Grants & Payments to Individuals .....	12,348.54
Grants to Institutions .....	45,300.00
Payments-In-Lieu of Taxes on State Game Lands .....	219,708.32
Refunds .....	1,071.56
Expenditures from Game Fund by other State Departments .....	<u>3,573.15</u>
	<u>\$12,328,411.76</u>

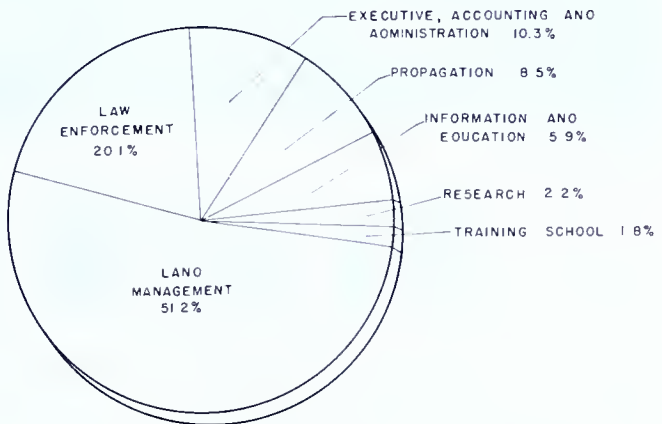
\*Includes \$2,073,000.00 for wages paid for Land Management Activities.



## GAME COMMISSION REVENUE \$ 11,347,549.91



## GAME COMMISSION EXPENDITURES \$12,324,838.61



## "Gone for the Day" Now Available in Book Form

Wildlife artist Ned Smith's "Gone for the Day" column, which appeared in these pages from January, 1966, through December, 1969, was one of the most popular features ever published in *GAME NEWS*. Ned's decision to discontinue it, made necessary by time limitations, saddened all of us here, and the many letters we received proved that our readers felt the same way. We know that many subscribers bind and file their issues of *GAME NEWS*, and thus have the opportunity to re-read these delightful columns when they desire, but we also know that many recent subscribers have never had the chance to see Pennsylvania's outdoors through the eyes of this gifted artist-naturalist. Now these persons, and the many others who want to have the complete set of "Gone for the Day," can do so. We are publishing all of these columns, including approximately 40 full-page wildlife illustrations and over a hundred pen and ink sketches, in book form. Entitled *Gone for the Day*, this 216-page paperbound book is available from the Pennsylvania Game Commission, P. O. Box 1567, Harrisburg, Pa. 17120. The price is \$2 delivered.



*Rountree Loves . . .*

## THE DUTCH OVEN

By Les Rountree

**I** WARNED YOU last month that I was about to become an expert in dutch oven cookery. I had experimented in my Boy Scout days with one of these fantastic devices, and how I have overlooked them for the past 25 years is a mystery. They are the most versatile camp cooking utensil ever invented . . . even including the cast-iron skillet, for which I have a fond regard. Fact is, the dutch oven will do anything the skillet will do and much more besides. In addition to frying, braising and simmering, the oven will roast and bake. It is unbeatable for stews and slumgullion combinations and can produce baked goods with perfection.

The secret is in the design. Three legs keep the bottom from direct con-

tact with the fire, making it easy to regulate the heat. The depth of the pot and the tight-fitting lid, as well as the thick cast-iron walls (the newer aluminum ovens are not, in my opinion, equal in quality to the iron ones), keep the heat in. Since you can bank coals all around and on top of the dutch oven, the heat is more uniform than in a skillet. With the skillet, the heat is *all* on the bottom.

The dutch oven inspiration all happened some months ago when I was rooting around in a stack of old *Field & Stream* magazines. I came across an article by Ted Trueblood in which he praised the dutch oven as being one of the greatest boons to mankind since the invention of the wheel. Knowing his reputation as a camp chef, it



spurred me on to ordering one of the devices. I had to order it, as few camping supply outlets stock them regularly. However, it took my local store only 10 days to get mine from a distributor. While we were waiting for it to arrive, I stumbled on an article by Stan Meseroll in *Better Camping Magazine*. Stan also had a lot of kind things to say about the dutch oven and it was there that I learned about *The Old-Fashioned Dutch Oven Cookbook*. This 106-page paperback by Don Holm is published by Caxton Printers, Ltd., Caldwell, Idaho, and sells for \$3.95. If you've read this column this far you must be an outdoor cook and I recommend that you send for this publication. My copy is dog-eared already.

In addition to learning about the "Care and Feeding of Your Camp Dutch Oven," which is the title of the first chapter of Holm's book, there are, scattered throughout the pages, fascinating bits of information. For example: Did you know that Lewis and Clark carried a dutch oven with them on their rather extended camping trip back in 1804? The trip took slightly over two years to complete and a dutch oven went all the way. It would be interesting to know just how *big* that oven was. According to Holm, the Lewis and Clark "corps" of hunters killed and ate, in round numbers, 3000 deer, 600 buffalo, 400 antelope, several tons of waterfowl, tremendous quantities of fish, plus many assorted bears, cougars, moose and bighorn sheep. Holm says, "It was the longest, writin'est, shootin'est, eatin'est, fishin'est cross-country adventure ever recorded in American tradition."

I don't expect everyone who buys

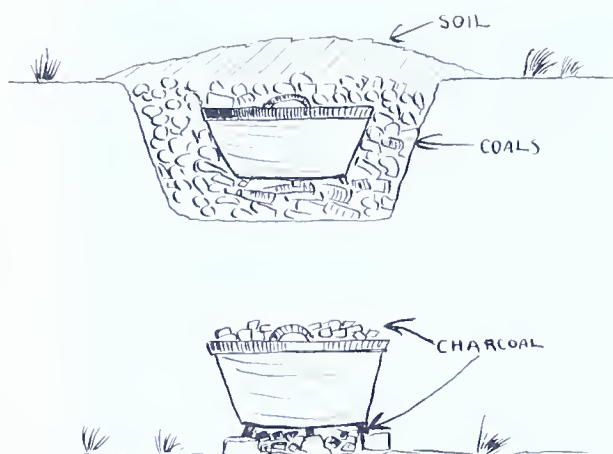


**A CAMP COOK** can prepare almost anything with a Dutch oven—even bake a cherry pie, which can make tent life better than a penthouse!

a dutch oven to embark on a 2½-year camping trip, but for good victuals in the backyard or in the sticks, I strongly suggest you try one. They come in a wide range of sizes from eight inches to Lord knows how big. I once saw one at an Adirondacks lumbering camp that must have been 30 inches across. According to the boss cook, it took a 50-pound sack of Navy beans to fill it up, except for some space at the top for laying on 15 pounds of salt pork. That's a lot of pork and beans! The 12-inch size will be about right for most campers and backyard experimenters, while the 16-inch size would be dandy for big groups or families and the 8-incher a good choice for one or two people.

Assuming that you have rushed right out and acquired a dutch oven, the first thing to do is cure it. The procedure is the same as you would follow for kicking off the career of a new cast-iron skillet. Since the dutch oven is also cast iron it needs to be greased and have its pores filled up





**TWO METHODS OF using a dutch oven outdoors—in a pit of coals for stews and roasts, and using charcoal briquets for baking.**

before it can be counted on to do a responsible job. It's easy to do. Heat the oven, including lid, over a campfire or in your kitchen oven until it is too hot to touch. Then coat the inside (don't forget the inside of the lid) with an unsalted shortening such as Crisco. Reheat at a medium low temperature for several hours until the shortening vaporizes. Most of it will. Wipe off the excess with a dry cloth or paper towel and you're in business.

Never — I repeat, never — wash the dutch oven or a cast-iron skillet with a detergent or scouring pad. Never put one in a dishwasher and don't try to scrape out sticky food particles with a sharp knife. If you scrub off the old seasoning you'll have to season it again. To remove sticky stuff, boil a little water in the bottom and it will loosen up easily. After boiling the water, wipe the oven dry and rub it lightly with a spot of shortening or, if you can find it, bear grease (that's what Lewis and Clark used). Bear grease is not available commercially . . . you have to shoot the bear and render your own if you want it!

While the dutch oven is unbeatable for roasting and stew simmering, the most interesting thing about it, from a camper's point of view, is the ease

with which one can bake in it. The dutch oven does a much better job than a reflector oven and doesn't require nearly as much careful watching. Any homemade pie or cake recipe works but, for the camper, the ready made biscuit, bread and cake mixes are ideal. For some reason they taste much better than when made in the kitchen oven.

The easy way to bake is with charcoal briquets or a hardwood campfire. The briquets are easier to use because you can buy them anywhere and use them in your backyard or campground fireplace. Light a pile of about 30 briquets and wait until the gray ash starts to form on the edges. Place the three feet of the dutch oven on stones to level it over about 12 briquets, evenly spaced under the pot. Put the lid on and with a pair of tongs or two forked sticks put about 18 smoldering briquets on top of the lid — again evenly spaced. While the oven is heating (about 10 minutes), mix up a pan of cake or bread. Place the pan on a cake rack in the oven. This rack doesn't come with the oven but you can buy one at any department store. The 10-inch size works best with a 12-inch pot.

### **Don't Open the Lid**

Go about your business for the amount of cooking time indicated on the box of mix. Don't open the lid until the minimum time is up. A lot of extra lid opening causes a tremendous heat loss and the cooking time will be considerably lengthened. If your creation takes a bit longer to cook, fine, but surprisingly, unless there is a stiff wind blowing, the cooking time on most bread and cake mixes will be what the directions indicate. Of course you should use more or less briquets if your oven differs in size from my 12-incher.

When you roast in your dutch oven you may prefer using the rack under the beef, pork or game. It will keep the meat from sticking to the bottom



of the pot and will keep it out of the juices. However most outdoorsmen place the meat right on the bottom of the pot.

For fuss-less cooking (the kind many campers like) the various combination stews and concoctions that backwoodsmen are prone to make are ideally suited to the dutch oven. Dig a fire pit slightly larger than your oven and build a hardwood fire. Let the fire burn down to glowing coals and shovel about half of them out. Then, mix up your stew (chili works fine too) and place the pot in the pit on top of the coals. Shovel the rest of the coals on top of the oven and cover everything with a little soil. Go hunting, fishing, hiking or sightseeing for six or eight hours. When you come back dinner will be ready without any last minute preparations. When you're bone tired after a tough day afield, nothing is more welcome than having the evening meal ready to eat. If you still have a little energy left, drop some dabs of biscuit on top of the stew and return to cook in the hot coals for another 15 or 20 minutes. Stew with fresh biscuits is a camp meal worth talking about. You may want to renew the fire a bit for this last minute baking chore, but after all you are going to brew up a pot of coffee so the extra fire won't be wasted.

What's the stew recipe? Well, just about anything you'd like to put in it. The famous Rountree Stew (oft-mentioned in this column) is a dandy place to start. Or you can dream up your own. Start with one big piece of meat or cut-up chunks (any kind of meat . . . beef, venison, lamb, pork or chicken). Toss in large pieces of vegetables such as potatoes, turnips, carrots, parsnips, cabbage, tomatoes and about three cups of water (more if your pot is really large and you are adding lots of meat and vegetables). Salt and pepper and add a dash of the seasonings you like best. I am partial to bay leaf with any kind of game,



**THE DUTCH OVEN** should be level, especially for baking. Pouring water on the lid makes it easy to get it set up properly.

but marjoram and thyme are also good. Be sure to add several beef or chicken bouillon cubes. It's fun to create your own stew combinations in the dutch oven and if you stumble across a really great one, write it down. Good recipes have a way of being forgotten. The beauty of inventing stews in a dutch oven is that it is almost impossible to make a mistake. The slow, even heating method cooks everything with little evaporation loss and the marrying of flavors lifts stews out of the ordinary. We all know that food of any kind tastes better outdoors but dutch oven stews are truly super.

Just in case you'd like to have some proven combinations to start your new dutch oven out with, here are some tested ones that end up perfectly.

### Wild Game Stew

Start out with pieces of squirrel, rabbit or anything you happen to have bagged. . . . I have used a tough old goose with this recipe and it worked beautifully. Either cut your meat into bite-sized chunks or leave the bones on. Douse the pieces in flour. While your fire is burning down to coals, use it to brown the meat in the pot.

Bacon grease or butter does a good job in this first step. When the meat is brown on all sides, remove the oven from the fire and add: a large can of tomatoes, a quart of water, a large sliced onion, 1 teaspoon salt, 2 cups of sliced carrots, 1 cup sliced celery, 1 large green pepper (chopped), 1 cup barley, 1 bay leaf. Put the lid on and proceed with the cooking. When you uncover the oven you may want to skim the excess fat from the stew and add some fresh ground pepper.

### **Ham and Potatoes**

We are very lucky to have a butcher who smokes his own ham and it is the best ham I have ever tasted. So it follows that most of our camping trips include a slab of this ham . . . and I am always looking for new ways to use it in camp. I tried this recipe with my dutch oven and found it easy and delicious.

Take a round of smoked ham big enough to feed your family. While your fire is burning down, brown the ham in bacon grease in the bottom of the oven. Remove the ham from the pot and add sliced raw potatoes (be sure to add extra since fresh air makes appetites keen), 1 sliced large onion, flour, salt and pepper. Layer the potatoes, onion, flour and spices—starting and ending with potatoes. Add enough milk to just cover the potatoes and top the pile with the ham. Put the lid on the oven and cook in the pot. Re-

member that after six or eight hours the concoction, while thoroughly cooked, could be slightly cool. If you have to reheat the pot just before eating, you may want to add a bit more milk or water.

In addition to being used for its intended purposes, the dutch oven can be used as a regular pot for boiling water and other top-of-the-fire dishes. The lid can be inverted over top of the fire and used as a griddle for pancakes or frying eggs and bacon. You can even pop corn in the oven.

It seems odd that something as ancient as the dutch oven would be the topic of this column. At least I find it a bit odd in these days of instant everything and the frantic search to make new and exciting products for campers. On second thought, the dutch oven is new to a lot of people. There's a whole generation of campers who probably have never seen one. For my stomach's sake I'm glad I rediscovered it and my guess is that you will enjoy playing around with one. Even if you never fancied yourself as being an outstanding camp chef there's a feeling of history involved when you scrape back the coals and uncover that black pot, the design of which hasn't changed in 200 years. If you let your imagination loose, for a second you can pretend you are Lewis (or Clark), or a Basque shepherd or some other favorite American folk hero. How's that again . . . 3000 deer?

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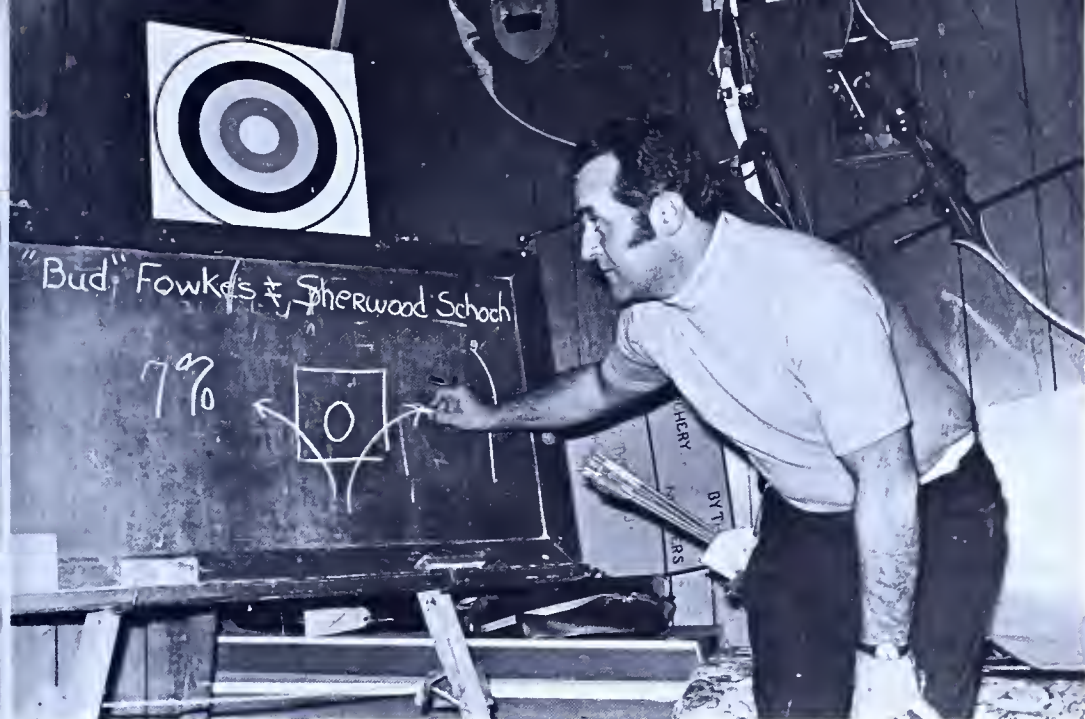
### **Let's Just Call It Two Pounds**

The average weight of the male goldeneye, a diving duck, is 34 ounces, while the female averages 27 ounces.

### **Hard to Do It Otherwise**

Condors range 100 miles or more from their roosts in search of food. Once airborne, they soar with wings outstretched most of the time.





**BLACKBOARD SKETCHES MAKE IT EASY** for Sherwood Schoch to illustrate a point at archery seminar.

## **Target Archery . . .**

# *From Basics to the Bonanza*

By Keith C. Schuyler

**W**HEN STAN WILLIAMS first suggested the idea of holding a winter archery seminar in his indoor basement range at RD 5, Bloomsburg, the idea had immediate personal appeal, for a number of reasons.

Most importantly, such a session could be an extension of the instruction given at the excellent school conducted under the auspices of National Archery Association at Stone Valley Recreational Area near State College. Stan is one of over 100 archers who now holds an NAA certificate of competence in teaching, earned at Stone Valley. But it was not his intention to conduct the seminar himself.

Rather, he called on the talents of Bud Fowkes, Verona, president of Pennsylvania Archery Association, a certified NAA instructor who teaches at the nationally recognized school, to handle the basics and the practical

side of shooting the bow. For coverage of bow shooting dynamics and the technical aspects of advanced shooting, he was promised the help of Sherwood Schoch. Schoch, a former national field tournament champion who has turned professional, is recognized as one of the top target names in the nation. He is currently associated with Kinsey Archery Products, Inc., and Howatt Archery Company.

The two men typify some of the best that can be found on the National shooting line from the standpoint of target archery. There was no question of their abilities. But trying to hold the interest of archers from various levels of competence represented a real challenge. Any misgivings were removed in the first few minutes of the seminar.

Those who paid a nominal fee to cover expenses and food for the all-

day session came to learn. And they did. It was no place for the rank beginner, but the pace in the presentation of theory, basic bow and arrow dynamics, and practical application, moved in a manner that kept everyone keyed up throughout the program. If anyone got lost, he had a chance to find himself when individual attention was offered following the seminar.

### A Bit on Background

To set the scene for this, a bit of background is in order. Anyone coming into the Northeast Conference of the Pennsylvania State Archery Association to instruct has his work cut out for him. Although the Conference is primarily made up of small communities such as Bloomsburg, Berwick, Wyoming and Benton, it has spawned at least two men's all-events state champions and one lady. George Slinzer, Luzerne, has been top bow five times, winning all events shooting both right- and left-handed. Lars Edburgh, formerly of Berwick, took the top spot two years running. Judy Jastremski, Plains, shared honors with Slinzer in 1963 to bring both men's and ladies' top awards to the Conference. Berwick Archery Club, of which Williams is a member, is one of the post-war pioneers in both field shooting and bow hunting. There are many knowledgeable archers here, but there is always room for more knowledge.

No two better qualified men could have picked up the challenge that awaited them. Fowkes, in addition to being president of PSAA, is a member of the NAA and was named coach on the 1972 U. S. Olympic Archery Team. In addition to instruction at Stone Valley, he has held various local seminars in the Pittsburgh area. His technical know how and background in the sport, as well as his ability to instruct others, is unexcelled. John Kleman, who has been ripping up the professional tournaments, is a protege of Fowkes.

Schoch, former editor of *Archery*

*World* and well known in bow hunting circles, turned professional a few years ago. Hailing from Boyertown, Schoch is well oriented in the basics of archery tackle. He has acquired much information through rubbing elbows with other archery greats in the pro circle as well as those who dig into the more technical aspects of why bows and arrows perform as they do. He has been holding advanced classes in his own area and elsewhere. He readily agreed to lend his talents to the proposed seminar.

The reason for reviewing this here is twofold. First, since this writer visited the 1970 NAA-sponsored school at Stone Valley, he has hoped to see the dissemination of such information into every corner of archery. Secondly, such a seminar can improve upon and develop the talents needed for a better performance in bow hunting. In total, as in any human endeavor, the desire and the drive for excellence can only lead to improvement in attitude and performance.

Since both Fowkes and Schoch made an informal presentation, open to questions from the audience, there will be no attempt here to cover the day's activities as a formal course. Rather, from the session has been taken the most pertinent points which can be of assistance to the advanced and the advancing archer.

It might be of encouragement to even the beginner to know that the seminar, beginning with a presentation by Fowkes, started with the simple basics of shooting the bow. These were expanded into: stand, nocking the arrow, pre-draw, draw, anchor, aim, post-draw, release, and follow-through. Initially Fowkes left the sixth







**ELOISE SCHUYLER releases as John Eroh, Northumberland, nocks an arrow under tutelage of Bud Fowkes.**

item—*aim*—blank, to emphasize that this is literally impossible until the first five basics are established. Serious archers are now advised to adopt the *square* or classic 90-degree stance. Such a stand, or stance, enables the archer to utilize his shooting muscles to best advantage while maintaining a stable human platform. Schoch, with his flawless shooting form, served as a model to demonstrate the various basics. Heavy emphasis was placed on the fact that unless proper shooting form can be established through individual adaptation of the nine basic actions of shooting, an archer is handicapping himself.

### Practice

To support the need for good form, Fowkes discussed the continued practice to which some of the top shooters subject themselves to develop their ability. As a case in point, he said that John Kleman, Latrobe, broke 17 arrow nocks in one evening of practice. Such shooting is possible only through consistent good form. (Top shooters occasionally break nocks when their

shooting is so consistent that the arrows attempt to occupy the same spot. Breaking this many in one evening is evidence of almost incredible accuracy.)

However, it was pointed out that no amount of good form will completely overcome the deficiencies of a bow and an arrow that are not properly tuned. It was explained that using a shooting machine will not closely enough simulate the human endeavor to produce usable information. Rather, it is more a matter of setting up a bow properly and then tuning it to the individual archer's shooting form.

For competitive shooting, Fowkes stressed the point that the most important arrow is the next one in the quiver that has not yet been shot. Once an arrow is released it simply becomes part of the total score. Any possible improvement lies only with the shafts that remain. Such thinking helps mental conditioning when under the stress of competitive shooting.

In his presentation, Schoch dwelt at length on the forces which are in play during the release of the bow and

when the arrow is in flight to the target. He likened the arrow to a missile which can only react to the forces applied to it during its flight.

In a discussion of shooting aids, Schoeh expressed the opinion that the spring-loaded pressure point at the arrow rest is the most important assist today available. He said if forced to make a choice, although the stabilizing rods are vitally important, he would settle for the pressure adapter at the arrow rest. The stabilizer gives lift to and dampens arrow movement on the release. However, the spring-loaded pressure button absorbs the shock of the tortured arrow to help get it launched as smoothly as possible toward the target.

#### Maximum Velocity

Schoeh reminded the archers that although the bow stores energy which produces work, it will impart the maximum velocity to the arrow in the first six or seven feet. However, strangely enough, the first action of the bow is actually toward the archer, before the sideways motion is created by arrow pressure against its side, followed by the rotation on the bow's axis resulting from the unavoidable side pressure of the string upon release.

It has been found out that if vanes break or one feather of the fletching becomes worn or damaged, something is wrong with the setup. Since there is an imperceptible pitch to the arrow as well as the violent side pressure, the arrow tends to do a barrel roll. The desire is to flatten this roll as much as possible so that the arc of the arrow's tail is reduced to a minimum. Schoeh pointed out that a properly balanced arrow and a properly tuned bow can be shot with good accuracy at up to 40 yards or so without any fletching whatsoever. In fact, he recommended shooting a bare arrow to get the bow in tune with the shaft.

Schoeh used a blackboard extensively to illustrate the forces at play when an arrow leaves the bow, particu-

larly when it passes the handle of the bow itself. He showed that the proper arrow rest will permit the fletching to clear without touching any part of the rest. This is important to avoid damage to the fletching as well as to eliminate any disturbing friction which might be created by such contact.

Properly tuned tackle will deliver an arrow the same each time, if a consistent draw length is used. It is the release of stored energy which sends the shaft, and this is determined by how far the string is drawn from its static position. Consequently, once the draw is determined, it is more a matter of making certain that the arrow is flying properly. Shooting the bare shaft (without fletching) into a target butt repeatedly at about 15 feet will

**BUD FOWKES EXPLAINS** action of stabilizer to Mary Boyer, Bloomsburg, during the shooting session which followed lectures.





soon establish how it is performing. If the arrow nock is high of level (above the line of flight) after it has been shot, the nocking point on the string is too high. It should be lowered gradually as additional tests are made. Contrariwise, if the arrow nock is below the line of flight, the nocking point is too low and should be raised until the arrow shoots straight from the string.

As an aside, Schoch recommended that two nock locaters, just far enough apart to accommodate the arrow nock, should be used. This prevents any sliding up or down the string as is possible where the single nock locater is employed.

Once the correction is made, it then remains to dampen any right or left tendencies of the arrow on its way to the target. This is where the spring-loaded pressure point on the arrow plate at the rest can be of extreme value. Early experiments were made with such simple assists as the spring from a ball point pen. Today there are commercial pressure points which can be installed permanently in the handle of a bow.

Increased tension on the pressure device will help to bring a softly spined arrow back on course. The opposite is true for a heavier spined arrow. (Spine is defined as the bend or deflection from straight when side pressure is applied to the top as the arrow is held rigid at the base.) If the lateral deflection cannot be minimized satisfactorily, the fault may lie with the shaft itself and a heavier or lighter spine may be proper.

Schoch said in experiments with conventional bows and arrows, he learned that a shaft flies best when weighted so that its center of balance is somewhat ahead of the normal point as determined by resting it on such as a finger or pencil. The difference is about seven percent of the arrow's length from throat of the nock to tip of point, or pile. This center of balance can be moved forward by plac-

ing solder within the hollow point insert. The insert is then heated at this spot to seat the solder. For example, a 30-inch arrow should have the center of balance moved forward about 2.1 inches.

Although release aids have become popular, they do not speed up any bow significantly. Their greatest value is that they reduce side motion created by the conventional finger release from a tab or a glove.

It was pointed out that arrow nocks can wear and should be replaced occasionally, even though they give little outer evidence of such wear. In selection of an arrow rest, it was recommended that one of plastic be employed since hard surfaces tend to accentuate the general vibrations created in the release of an aluminum shaft.

#### **Fistmele Important**

Surprisingly, Schoch said that there appeared to be little difference in the performance of a bow based upon the number of strands in the string within what might be considered normal limits. Further, twisting of the strands has little or no serious effect on the string's performance. However, brace height, or what was formerly known as fistmele, becomes important relative to the performance of heavily recurved bows of today. Schoch pointed out that it is necessary to *cock* the recurve sufficiently (during the draw) to obtain full advantage of its dynamic characteristics. For a starter, he recommended that no more than 1½ inches of the string lie against the bow at the tip when the bow is strung and at rest. Some bows of identical length, depending upon the amount of recurve, shoot best with a much higher brace height than others.

In a discussion of sights, both instructors indicated that they were inclined toward a combination which includes the use of the so-called peep sight familiar to gunners. Behind this recommendation is the fact that it is

difficult when a single post or pin is placed on the bullseye to know exactly what part of it is covered. In today's competition, the ability to shoot at the exact center of the bullseye will lessen the chance that arrows might stray into the next ring. If a peep aperture is proper for the archer using it, the bullseye appears to pop out when it is covered in the peep.

It was emphasized that tuning a hunting bow is equally important and employs the same basic practices as in tuning one to be used in top tournaments.

Following the presentations and demonstrations, individual instruction and help in tuning tackle was given by both Fowkes and Schoch on the shooting line at the range. Interest continued high and the session continued informally well past the stated hours of the planned presentation. Some of those present traveled over 200 miles for the session and there was a sprinkling of top archers from Eastern Pennsylvania as well as a core of local enthusiasts.

In this necessarily brief outline of the seminar, the purpose is frankly to encourage more such sessions by qualified people around the state. It is certainly significant that people such as Fowkes and Schoch are willing to share their knowledge with others

without remuneration. Schoch freely admitted that, although he has made countless personal experiments to improve his own ability, much of what he has learned has been passed along by others. Many of the advancements in technology and information have been developed by those who are fascinated with the bow and arrow as a challenge in mathematics and dynamics rather than a personal interest in tournament shooting. All of this augers well for the future of archery in Pennsylvania and elsewhere.

Probably the most important significance to an archer exposing himself to such instruction is simply to gain enough knowledge that his potential can be reached on the shooting line or in the hunting field. Certainly there is not room for everyone on the winners' platform. However, no one should shoot less than his best, and his best is attainable only by combining knowledge with whatever ability he possesses. Such a combination makes a winner of sorts out of all of us. Whether we simply improve our scores, down that deer that we have been missing, or win top money at one of the professional tournaments, there is a bonanza in this for each of us.

Knowledge is as static as a bow at rest until its stored energy is released in performance.

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## *Books in Brief . . .*

*The Poconos*, by Thomas H. Knepp, pub. by the author, 706 Scott St., Stroudsburg, Pa., 1971. 146 pp., \$1.50, paperback. A guide to vacation spots and points of interest in northeastern Pennsylvania.

*Animals Nobody Loves*, by Ronald Rood. Stephen Greene Press, Brattleboro, Vt., 1971, 215 pp., \$6.95. A compassionate and humorous look at creatures such as the flea, mosquito, rat, bat, spider and eel.

*Art of Successful Deer Hunting*, by Francis E. Sell. Stackpole Books, Cameron and Kelker Streets, Harrisburg, Pa., 1971, 192 pp., \$2.95. A Rubicon paperbound edition of *The Deer Hunter's Guide*. Fine information on deer hunting methods for areas of light hunting pressure.

*The Mustangs*, by J. M. Roever and Wilfried Roever. Steck-Vaughn Co., Austin, Texas, 1971, 30 pp., \$2.95. A delightfully illustrated young person's book on the wild horses of the American West.



*With All the Fanfare Given the Big Calibers, the Little 22 Rimfire Is . . .*

## More Than Meets the Eye

**By Don Lewis**

*Photos by Helen Lewis*

I ENTERED THE dry woods too fast to keep from making a racket. I was late. Too late, I thought, to see a squirrel. I hurried to a spot near the center of the 10-acre woods that would allow me to watch some high trees plus several den trees. With my boots I cleaned the leaves from around the base of a medium-sized oak so I could walk around it without making a sound. Satisfied that I could start watching, I checked my watch and found that I had just 47 minutes of legal hunting time. With all the crashing around I had done, this was not much time for the woods to get normal again.

As usual, I immediately began making mental notes on distances. I try to determine in advance how far it is to certain trees, stumps or logs in various places near me. This helps when I do sight a squirrel.

Off to my right, the woods were as clear as a pasture field, and I could see a den tree 45 yards away. Scrub brush blocked most of my view in front, and small red oaks and grapevines nearly blotted out a large black oak on the left side. This large oak always looked impressive but never had produced a squirrel for me. Since it was nearly impossible to see the big oak except for one heavy limb that was partly silhouetted against the skyline, I pinned my hopes on the den tree off to my right.

From the mental timetable I had set up, I felt it would take a good 15 minutes before things started moving. When I saw a flash of gray on the big black oak, it didn't occur to me that it



**DON LEWIS OFTEN** takes target model Savage/Anschutz into squirrel woods despite its weight. He finds it deadly on distant bushytails.

was a squirrel. When I realized it wasn't my imagination or a passing woodpecker, I grabbed my rifle. With all the brush and grapevines between me and the tree, I entertained little hope for getting a shot. Several times I caught glimpses of the squirrel as it jumped from limb to limb, but after five minutes of holding the heavy rifle against the tree, I relaxed and lowered it. At the same instant, the gray jumped on the big limb and sat in full view. Just as my scope picked up the gray, it disappeared into the early fall foliage. I held the scope on the limb and waited for the gray to come back down. I knew this was skating on thin ice, but there wasn't much else I could do. I was about ready to give up for the second time when the gray slid into view. I settled the 6X target scope on the gray's neck and touched the light trigger. To my surprise, the gray hesitated a few seconds and then jumped toward the trunk of the tree and was gone. I don't claim to be the

world's best squirrel shot, but I was finding it hard to believe that I had missed such a shot from a rest.

Disgust ran all over me, and I booted the base of the tree I was watching from to register my feelings. I looked toward the black oak just in time to see a squirrel flip-flop through the air. I knew from the sound of it hitting the ground that I had collected my first squirrel. This certainly made me feel better and restored my confidence in my squirrel shooting eye. In fact, I was so engrossed in mentally congratulating myself that I nearly missed seeing a gray race across a log and head for the same black oak. I couldn't bring myself to think it was the gray I had just shot, even though it came from the same direction. The manner the gray had come out of the tree and the crunching sound it made when it hit the ground convinced me it was dead when it landed. A live squirrel never turns over and usually lands with more of a swish than a dull impact sound.

I didn't have long to analyze the situation; the gray never stopped until it reached the exact spot I had just fired at the first squirrel. I took more time and concentrated on getting a perfect sight picture. When the Anschutz cracked, the gray fell immediately; it was a perfect shot.

### Two Nice Grays

I waited 20 minutes before leaving my stand. I still had a little time left, but I allow enough time to hunt back to the car. I hadn't estimated the distance to the black oak since I wasn't expecting any action in that direction, so I stepped it off. I reached the tree with 48 long steps and found two nice grays, one shot through the lower neck and the other in the head. The angle I was shooting up to a height of about 40 feet convinced me that I had just connected on two 50-yard shots, and I contend it takes a good rifle to handle shots such as these.

I have no reservations about classi-



**SOME RIFLES USED often:** Remington M572, Weaver V22 scope; Remington M581, Lyman 10X; Browning T-Bolt, Redfield 4X; Savage/Anschutz M64, Unertl 6X; Winchester M75, Litschert 10X. All give fine results.



fyng my M64 Savage/Anschutz with its 6X Unertl one-inch target scope as one of the finest squirrel rifles I have ever used. Its bulk and weight as a semi-target rifle might be considered drawbacks by some hunters, but I, for one, am willing to put up with these characteristics when I know that I can pin-point shots at distances where many other rifles would leave me empty-handed.

### Most Overlooked Gun

The longer I work with and write about rifles, the more convinced I am that the common 22 rimfire is the most overlooked rifle in today's realm of shooting and hunting. The failure of many shooters to realize that the 22 rimfire is more than meets the eye rests a good bit on the fact that gunwriters for many years reported on the 22 rimfire much the same way big league baseball announcers report on Class D teams. In other words, they are so busy talking about the stars of the big time, that they rarely mention the smaller teams, ignoring the fact that these unknown teams are really the foundation of the major leagues. Gunwriters for too long have been guilty of doing much the same thing. Big game hunting and big game rifles get most of the limelight, and few gunwriters want to give much column space to the insignificant 22. Yet, this little cartridge has started more hunting careers than all the Magnums. In my estimation, the 22 rimfire is still the basic cartridge.

For one thing, the 22 rimfire is not just a toy or a boy's rifle; it actually is a genuine rifle that has a definite place in any shooter's career. This cartridge is in a class by itself. It isn't suitable for big game nor are its ballistics impressive, but this does not mean it has no place in the gun fraternity except for plinking or indoor competition.

The first honest to goodness rifle I ever owned was a chain store version single-shot 22 which I still have. I'll



**THIS TARGET, shot at 50 yards, indicates the kind of accuracy a high-grade 22 rifle and match ammo will give, shows why they work on squirrels.**

refrain from mentioning the manufacturer, but back in those days when all factory products were supposed to be of the highest quality, the 22 I received for Christmas was a gun designer's nightmare. Not only was it a piece of pipe stuck in a hunk of dead wood, it was about as safe as a mine mule that had just bumped into the trolley electric cable. Several gunsmiths cured it for me and took my quarter for their efforts, but within a day or two, it was right back to its cantankerous ways. I soon learned to treat it with real respect, and I managed to overpower the beast most of the time, but when it jumped off safe and put a bullet between my feet, I stuck it in the barn where it was used exclusively as a rat gun.

Later I became acquainted with the Hamilton, the Stevens Crackshot, the Iver Johnson 22 Safety rifle, Savage's Model 23, the now-forgotten Savage Model 04 single-shot, and a dozen more during those years. I suppose I keep extolling the virtues of the 22 rimfire because it's plain to see I cut my shooting and hunting teeth with this caliber. I remember well the times on the trapline when I carried a bor-



**HELEN LEWIS TRIES the M1413 Savage/Anschutz with 20X Redfield. Accuracy is superb, but this one is too heavy for Don in the squirrel woods!**

rowed Remington 12A pump. It was one rifle that I wanted so bad I could taste it, but I never managed to scrape up the \$10 the owner wanted. Red squirrels were plentiful and made good weasel bait, and the 12A pump made some spectacular shots and kept me well supplied with bait.

I shot chucks by the dozen using the famous Super-X hollow point. Most shots were well under 75 yards and it was the goal of every chuck hunter back then to make clean head shots. The powerful Super-X hollow point bullet was very effective under 100 yards, and I made a number of kills with shoulder shots. I had full confidence back then and never felt I was under-gunned.

I'm not trying to hang on to the past, but I don't think we should feel that the 22 rimfire is a rifle that belongs in the past. True, the boy of today doesn't have to run a trapline to earn license and shell money, nor does he bargain with a neighboring farmer to shoot crows for 10 cents a head, but this doesn't make the 22 rimfire obsolete or a cartridge that has to be forgotten. There is plenty of

shooting in our modern era that seems specifically made for the rimfire.

Most readers of this column know by now that I'm a sincere and avid advocate of hunting squirrels only with the scoped 22 rimfire rifle. Undoubtedly, there are more frustrations and loss of shots in squirrel hunting with the rifle than any other form of hunting I know. Yet, with all the pitfalls and disappointments, the hunter, especially the young hunter, benefits more than most realize from the knowledge, experience, self-discipline and patience learned here.

Another reason a good segment of the hunting society never generated too much enthusiasm for the 22 rimfire rifle is that a large number of rifles from the past and present are poorly designed, lack craftsmanship, and are inaccurate. I often wondered just what went through the minds of the designers when I examined some particular rifle closely. Many versions I worked on were a discredit to even amateur gunmakers. Why major gun companies would permit these models to hit the market when all they could bring was criticism from the public is more than I have yet figured out. The tremendous amount of makes and models suggests that the manufacturer found it easier to come up with a new version than to put quality and workmanship into a reliable outfit.

#### **No More \$4 Single-Shots**

Building a good 22 rimfire shouldn't be too difficult. We all realize that the day of the \$4 single-shot has gone forever. There is no need in today's society to design a rifle for nothing more than low cost. The average shooter who wants value for his money would not mind paying \$10 to \$15 more for a rifle that would have quality in its construction, good wood in the stock, and an action and trigger that was smooth and crisp.

I was happy to see in a M581 Remington I'm testing that the bolt has six locking lugs. This is a step in the



right direction in bolt design. Perhaps there is no safety need for such locking lugs on a 22 rimfire bolt, but most bolts get very sloppy after a few years' service and these locking lugs will prove their value.

I mentioned the trigger as one aspect of the 22 rimfire that gets little attention from gun designers. Apparently, they feel that through sheer strength, the shooter will get the shot off. Most 22 triggers consist of a hunk of white metal, pressed links, and a conglomeration of springs that defy description, and with this contraption the shooter is supposed to get off a well-aimed shot. I say it's impossible. I've actually weighed triggers that scaled out at an unbelievable nine pounds. There is no sound reason why any manufacturer should turn out a trigger that has a pull above five pounds. I firmly believe that for very little more money on the manufacturer's level, he could produce either an adjustable type trigger or one that has

a fixed four-pound pull. Four pounds is still heavy, but it's a far cry from the six to nine pounds that many of today's triggers have.

Some years ago, I reworked a Remington 521T's trigger by incorporating parts from Remington's 513 semi-target rifle. The end result after much shooting showed a drop in the groups' size from an inch to an average of  $\frac{3}{8}$  inch at 50 yards. What seemed to be just another mediocre rifle was turned into a superb squirrel outfit by reducing the trigger pull to three pounds. I keep my Anschutz set at  $2\frac{1}{2}$  pounds for squirrel hunting, and no matter how difficult the shot, I know I won't pull off the aiming point while squeezing the trigger.

Some may not give much thought to actions for the 22 rimfire, but I've found the bolt to far outshoot either the lever or the pump. With its edge in speed, the pump appeals to a lot of plinkers, but I can't rate it too highly as a good squirrel outfit. In

## 22-CALIBER RIMFIRE RIFLE TEST RESULTS

Range—50 Yards, Benchrest

Chronograph—Avtron K233

Rifle	Barrel length	Scope	Cartridge	Velocity fps	# 1	Groups # 2	# 3
Browning T-Bolt	24	Redfield 4X	Win. EZXS	1101	5/8	9/16	1/2
Savage/Anschutz 64	26	Unertl 6X	Win. EZXS	1048	1/2	1/4	7/16
			Rem. Std. Vel.	1114	5/8	3/4	3/4
			Win. Pistol Match	1110	3/4	5/8	5/8
			Sav. Eley Tenex	1066	1/2	3/8	1/2
Remington 581	24	Lyman 10X	Rem. Std. Vel.	1122	7/8	1	7/8
Remington 572	24	Bushnell 8X	Rem. Match	1097	3/4	5/8	3/4
			Win. EZXS	1156	1 1/4	1 1/2	1
Winchester 75	28	Unertl 6X	Rem. Std. Vel.	1119	1 1/2	1	1 1/4
			Sav. Eley Tenex	1076	1/2	9/16	5/8
J. C. Higgins	24	Lyman 10X	Win. EZXS	1090	1/2	7/16	1/2
			Win. EZXS	-----	1 1/4	1	1
Remington 511	24	Weaver V-22	Rem. Std. Vel.	-----	1 1/4	1 1/2	1 1/4
			Rem. Std. Vel.	-----	1 1/2	1 1/4	1 1/2
Mossherg 346K	24	Lyman 10X	Sav. Eley Tenex	-----	1	7/8	7/8
			Western Xpert	-----	1 1/8	1 1/4	1
			Rem. Std. Vel.	-----	1 1/2	1 1/2	1 1/4
Winchester 67	26	Weaver V-22	Rem. Match	-----	1	7/8	1
			Rem. Std. Vel.	-----	1 1/2	1 3/4	1 1/2
			Win. EZXS	-----	1 1/4	1 1/8	1 1/8

NOTES: Velocities given are in feet per second and were taken at 15 feet; they are averages of five shots. This information is presented for the reader's interest and represents actual results obtained by Don Lewis while testing the rifles and ammunition listed. It is expected that these results are similar to what might be obtained with other rifles in these classes, though individual firearms of the same models might give superior or inferior groups.

the groups I've fired with all three action types over the years, the pump always came in last. This is not meant to imply that it can't be used successfully as a squirrel rifle or short-range pest buster, but I haven't found many pumps that were consistently accurate. The run of the mill bolt action 22 will average around one-inch groups at 50 yards with target ammo, and the lever action will stay pretty much in the same category. The many pumps I've fired seldom hit an inch and mostly gave 1¼- to 1½-inch groups.

I've mentioned many times that switching to target ammo from high-speed stuff will up the performance of nearly any 22 rifle. I have seen rifles that would handle low velocity or high speed fodder with equal results, but the low velocity target ammo will be far more consistent.

Not all 22 rimfire shooting need be done in rifles. I have a High Standard Supermatie Trophy Military model autoloader which can cut some very impressive groups. I believe it is one of the best balanced outfits in handguns that I have ever handled.

The Thompson/Center Contender surprised me with its accuracy after Bob Gustafson from Thompson/Center Arms sent me one of their new Puma 1½X scopes. I immediately mounted it on the 22 barrel and fired a number of tight groups with the Contender on my 35-yard range.

Ruger's Single Six also proved accurate. It's an extremely well built revolver that shows good design and

better than average workmanship, both inside and out.

I could go on and on naming various makes and models of rifles and handguns, but I'm a great believer in allowing the buyer to make up his own mind. I will say that not all 22s on the market today will give ½-inch accuracy at 50 yards such as delivered by the 54 and 64 Anschütz, the Browning Deluxe T-bolt, and the old M75 Winchester, but most will stay within an inch. I fired 50 rounds—10 five-shot groups — from the new Remington M581 scoped with a Lyman All-American 10X, and averaged out to ¾ inch, with the best group being ⅝. This is respectable grouping and would serve the squirrel hunter satisfactorily. One thing I did find with the 581 was that in using four different kinds of ammo, including Remington's match ammo, there was no spectacular change in group size. Many rifles definitely prefer one make to another.

As I stated earlier, my reason for writing about the 22 rimfire is to stimulate new interest in this particular cartridge. Don't look disdainfully at this little rimfire; it's a good cartridge with plenty to offer. In a good rifle, pinpoint accuracy is possible, but there won't be the noise and power of the Magnums nor will the distances stretch into hundreds of yards. One thing I've learned from hunting for a good many years with the 22 rimfire is that it possesses the same ability to make a fellow humble as do its bigger brothers.

## Looking Backward . . .

"Sugar maple held an outstanding place because of its importance as a source of syrup and sugar, but its fermented sap also yielded a vinegar that the red man found to his liking."

W. P. Alexander, "We Made an Indian Garden," "Nature Magazine," No. 3 (March 1941), p. 143.



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# PENNSYLVANIA GAME NEWS

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#### COVER PAINTING BY J. M. ROEVER

When most Pennsylvanians think about squirrels or squirrel hunting, they have the gray squirrel in mind. Or, on occasion, the red squirrel. However, out in the western part of the state another bushytailed tree-dweller can be found—the fox squirrel, *Sciurus niger*. This big, comparatively colorful fellow usually forages on the ground, often a long way from his den tree. He prefers a woodlot with nearby fields, rather than big woods country, and he loves to sit on or run along old rail fences. He's slower than the gray, and not as graceful, yet he's worthy game for the sportsman lucky enough to live in a region he frequents.

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## Let's Face Facts

**E**VERYONE IN THE COUNTRY who wants to hunt in Pennsylvania but lives elsewhere knows that our nonresident license fee was increased last year. I know they know, because almost all of them have written to me about it. Many recognized that an increase was necessary, but objected to the fact that there had been no boost in the resident fee. What most did not know was that the Game Commission had asked the State Legislature to increase resident fees by the same percentage—to \$8.20—but the lawmakers, whose decisions govern this action, did not see fit to do so. Apparently they felt that the nonresident increase would be enough. But because the price boost seemed discriminatory to nonresidents, many regular visitors stayed home and say they will not return as long as the current situation exists.

The result could be a serious financial crisis for the Game Commission. Our Financial Report for the past fiscal year appeared in last month's GAME NEWS. It showed that income was almost one million dollars less than expenditures. It also showed that about 70 percent of our revenue comes from hunting license sales. Yet, despite the constant rise in costs of everything connected with the wildlife management program, the price of a hunting license has been the same in Pennsylvania since 1963. And there is no doubt that, in certain areas at least, expenses will rise even faster in the near future. For example, state employees now have the right to collective bargaining. This will cost the Commission upwards of a million dollars a year. The Commission does not oppose this increase, but has in fact worked for years to bring pay scales and benefits into line with those of private industry and other state agencies, a goal supported by both the organized sportsmen of Pennsylvania and many individuals. Nevertheless, this money has to come from somewhere, and unless Commission revenue is increased there will have to be a slackening in highly important services and programs.

Pennsylvania has a lot of hunters—about 10 percent of our total population buys a license each year. However, the number is leveling off, so not enough license money is available from new hunters to overcome increased operating expenses.

Do you want to significantly decrease such programs as buying more land for public hunting and other use, improving wildlife habitat on such land, research on deer, rabbits, pheasants and other game species, game bird propagation, law enforcement work which greatly benefits the legitimate sportsman, etc.? I doubt it. Or would you prefer that when a district loses its Game Protector through retirement, that area be left vacant? I don't think you do, as the Federation of Sportsmen's Clubs, for instance, has supported the Commission's recent policy of training a new class of Game Protectors every two years instead of every third year as formerly was done. Such things are necessary to the overall program, but they do cost money.

Pennsylvania's longtime leadership in the field of wildlife management has been made possible by three things—cooperative legislators who have supported an excellent Game Law and provided amendments for increased revenue when called for by the Game Commission, highly qualified Commission personnel, and their support by Pennsylvania's outdoorsmen, sportsmen who can face the facts and recognize that it's impossible to get anything for nothing.

*(Continued on Page 41)*





ANDREYKS



# The Hunter's Moon

By Al Shimmel

**W**HEN THE Hunter's Moon climbs like a copper disk above the hills, a restlessness is mine. The restraint of roof and walls irks me. Comforts of fireside and easy chair are frauds. I have the urge to prowl. I must be out of doors. Some predatory instinct from the past rises to the surface and sends me softly along the edge of the shadows while my eyes search the moon-drenched openings among the trees. My ears are sensitive. When I hear faint rustlings of other feet I know the restlessness is not mine alone.

High on the shoulder of the ridge a huge oak guards the point that overlooks the valley. Far below the lake is like quicksilver flanked by the darker shadows of the swamp.

Suddenly my ears are tuned to far off murmurings. The sound is like to that of baying hounds. I know it for the chant of south-bound geese. Closer they come. At last I see the skein of wavering silhouettes as they pass between me and the moon. I listen hard until the sound fades into silence, lost beyond the distant hills.

I turn toward the lake. Another sound comes faintly from below. It is a ghostly tremolo, somewhat coarser than a screech owl's whimperings. I hear it once again and know it for the wickering of a hunting coon. I rest against the oak's rough bark. Nostalgia for the past comes flooding back.

The hound that stepped with dignity from the shipping crate could have been sired by a syndicate. A knowledgeable houndsman would not have given him a second look, but to my youthful eyes he was all that was desirable. He slowly wagged his feathered tail when I stroked the broad dome of his head. His croppy ears were battle scarred. Dad handed me the papers. American Coonhound

—Three years old — Joe — Guaranteed. . . .

I owned a hound! I had the key to the adventure I had been seeking. There was a hope of pelts to sell. Also there was his care and a responsibility I did not realize. Dad smiled. "You'll learn a lot," he said.

Four days to wait. How long it stretched away! Friday came at last. No school tomorrow. Tonight we would make a trial run.

That night is etched indelibly on my memory. The spicy smell of cider apples heaped beside the orchard path, waiting to be bagged for the mill. A hint of woodsmoke in the air and the damp crispness of fallen leaves touched by the frost. I can still feel the eager tug of the hound against the leash, as Dad and I walked the ridge road through the timber to the corner of the hill field that marked the edge of Lum's Hollow.

## Hound Released

Here we released the hound. I turned a lever on top of the lamp to allow water to drip into the carbide and form acetylene gas. Cupping my hand over the reflector, I spun the wheel against the flint and smelled the pungent sharpness as the gas popped into flame. I fitted the lamp to the frame of the new canvas mining cap, settled it upon my head.

Within the circle of our lights Joe gave his attention to the corner of the rail fence and then pattered away into the darkness toward the hollow.

Twenty minutes later he homed to our lights and waited until we moved some distance farther on. Again he disappeared into the shadows. We waited in silence, listening.

A flying squirrel planed out of the darkness to the base of an oak not far away. I marveled at the speed with



**THE BRANCHES** rustled as the second animal, unnerved, jumped free. I scrambled down . . . the coon and the hound were gone.

which it climbed. A deer mouse ran out of a tiny tunnel near my boot and disappeared under a fallen branch. A shrew followed in hot pursuit and darted into the same burrow. I was sure by the twitching of its whiskers that it followed the mouse by scent.

A burst of sound rolled up from the hollow, deep tones that sent primordial chills flowing in waves up my spine and raised the hackles on my neck. It came again. I looked at Dad. His face was a mask of disbelief. Some magic held us in a spell. The chase came up the brook that flowed below and turned along the hill toward the west. I would have followed but my father laid a restraining hand on my shoulder. We listened, picturing the chase along a rail fence that separated the hill fields from a timber slash beyond. The pace slowed at times but never faltered.

Suddenly silence came. We listened hard. Behind us a screech owl whimpered and complained. Below us on the slope something moved. It came

at last . . . a steady chop, as if some great clock of the woods was marking time. By mutual consent we moved toward the sound.

We fought our way through brush and briers of the timber slash and in its very center found the tree, a tall straight oak. Joe stood against the trunk, booming his challenge to the black-masked game hidden somewhere among the shadows high above.

Joe followed as we circled the tree in search of shining eyes. He had fallen silent now. We searched in vain. My hopes were sinking fast. The hound could not be wrong!

My father, seldom at a loss, showed me the trick for finding what we sought. He stretched a laurel leaf between his thumbs, cupped his hands and blew an eerie, squally sound. Out of the dark two pairs of eyes looked down. What luck! A double on our first night hunt.

Dad hid the ends of two twigs in his hand. "Long stick climbs," he said. I pulled the nearest one. The twig seemed endless. He took the climbing irons from his hunting coat. I strapped them on, buckled the belt and threw the safety strap about the tree. The gaffs were extra long to sink through bark and find sound wood beneath. Dad had been a linceman in his younger days and had taught me to use the irons long before. "You'll need this too," he said, and handed me a hank of mason's twine.

#### **Hiss and Growl**

I hitched the belt upward and began to climb, not certain what lay ahead. When I reached the first branch, the ground where Dad's light shone seemed far away. Weird shadows danced as I turned my head from side to side to find our game. When I reached the third limb I was aware of the coon, clinging like a burr out near the tip. I shook the limb as best I could with no results. It hissed and growled and kept its place. Its bared teeth shone in the light. The hound below set up a clamor once again.



"I can't reach him," I called, and dropped the end of the mason line to Dad. He cut a stout stick and tied it fast. I drew it up, hooked my safety belt to the limb above, and used both hands to prod the beast until he tired of the game and jumped.

The hound leaped high to meet the falling coon. Even from my perch I heard them meet. The coon squalled once and that was all.

I had forgotten there were two until the branches rustled as the second animal, unnerved, jumped free. I scrambled down . . . the coon and hound were gone. A quarter mile, and then we heard the now familiar bay-ing cry. We made our way to find the quarry safe, not in a tree but deep in a den beneath a ledge of rocks.

When we climbed out of the hollow to the hill a Hunter's Moon shone full and red. Joe no longer tugged at the leash but walked sedately at my side. We stopped, emptied our lamps and walked the moon-shadowed woods road in silence. A bond between us made words unnecessary. Weariness approximates content. . . .

The weekends of that autumn fled away. Each one brought some small adventure. Joe's voice became well known. Sometimes when the chase came near one of the hill farms, a sleepy farmer would appear and hunt with us. Often an invitation to the farm kitchen for a midnight snack followed the chase. Our Joe became "Old Joe" to them. We were the protectors of their cornfields and poultry houses. A night chase was a welcome break from farm routine.

The news that we had a good hound spread among the hills. Friends came to hunt with us and hear the chase. Some came and hunted once, then came no more, for it was rugged sport, but others came and came again.

Among those who came was Steve, a little younger than myself. He loved those night adventures with the dogs. I had two now. Pepper was an Airedale youngster that Old Joe had taught

to run. A happy warrior he, that loved a fight and ran to kill, not only coon but any vermin he could find.

Another Hunter's Moon had come. With Steve I climbed the Turner Ridge and followed the winding trail past the Crooked Oak to the head of Twoey's Hollow. Free from the leash the dogs hustled down the hill.

### Away They Went!

We did not have long to wait. They struck, not far from a known den tree on the slope. Away they went following a spring brook to the larger creek. Across the valley farm they trailed. An orchard on the farther slope was bounded by a fence of rails. The quarry ran the top of the fence and slowed the pace. A luckless possum happened in the way. Pepper paused just long enough to make the kill. We took the pelt then followed after them.

This coon was a wise old campaigner that had been chased before. Twice he butted trees. Pepper was fooled but not Old Joe.

Butting a tree is a trick practiced by a trail-wise coon. It leaves an easy trail directly to some large tree, climbs some distance up the trunk, circles to the other side and jumps, landing as far as possible from the tree. A lesser hound will bark up, while the coon will use the time to run ahead and hide its trail. An experienced hound will circle such a tree at varying distances and pick up the trail with little loss of time.

The trail grew warmer along the north side of the hill. A high pasture cut into the woods. Here again the raccoon ran the rails to slow the dogs. I had picked some Dutchess apples from the orchard as we passed and Steve and I sat on the fence and ate them. They were crisp and juicy. I can remember the tart goodness of their taste.

The close cropped pasture was almost light as day. Two springs a hundred yards apart fed brooks that flowed down the slope and met to form a stream which crossed the lane

and lost itself in an elder swamp bordering a dense stand of hemlocks.

We saw the dogs race their shadows across the grass to the confluence of the two brooks. The trail led up the farther brook to the spring, crossed the pasture and came down the nearer brook to where they joined. The chase fell silent now. They worked the circle twice but could not find a trail away.

#### A Real Puzzle

The bridge across the lane was made of planks set in abutments of native stone. The water underneath flowed swift and deep. Seldom had a trail puzzled the dogs for so long a time. We sat on the bridge while the dogs hunted. Finally they came down to us. Joe stopped just above the bridge to drink. Suddenly he plunged into the water and the current carried him under the bridge.

We heard strange sounds. He came out below, swung around and, swimming desperately, tried to breast the

current. When he failed to make headway he scrambled up the bank, ran to the upper side and plunged into the water once again.

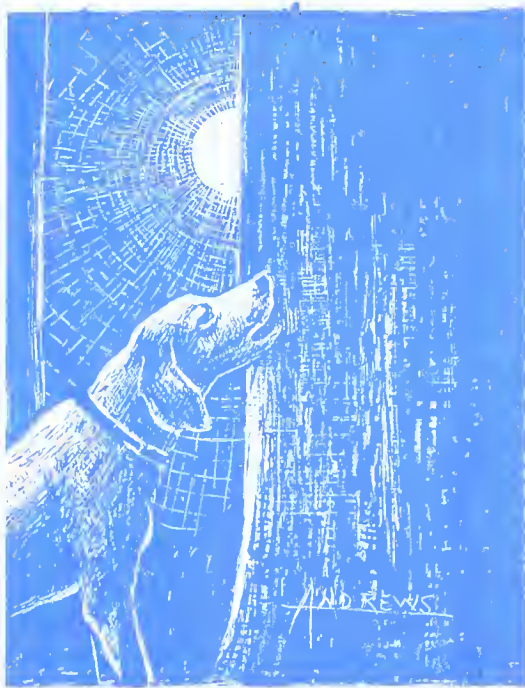
Pepper followed. Sprawled on our bellies we held our lights close to the water to peer beneath the bridge. The coon was lodged in a crevice where a loose stone had slipped from the abutment. The current carried the dogs while they struggled desperately to stop and make the fight. The coon had the advantage. He could reach out with his armed feet and punish the dogs while remaining well protected.

Finally both dogs came down almost together. The coon reached out to claw Joe's head and that gave Pepper an opening. He grabbed the shoulder, closed his eyes and hung on. The coon squaled. Splashing water and thrashing bodies mixed in wild confusion. The dogs came out from under the bridge, pushed by the current, sputtering and coughing from the water they had taken in, but each with a solid hold on a sodden, bedraggled, very dead coon.

No sooner had they gained the bank than they began on each other. We separated them with some difficulty and leashed them to separate sections of the fence until their battle tempers cooled. We hefted our prize. He was very old, heavy and battle scarred. He grew much heavier as we walked the three long mountain miles home.

A short time later, Mr. Wood, one of Dad's friends, acquired a new hound. Often he had hunted Ring, a proven hound, with our Joe. Now we would test Bucky Boy against the veterans. This new hound had come from the Deep South carrying a set of papers that listed many champions in his line. But "papers won't tree a coon," was an expression often heard when hunters met.

We admired Bucky Boy's clean lines but reserved our judgment. It was a race to prove this wonder hound. The home grounds would not do. We must set them down in a strange territory that would not give our seasoned



**AN OLD COON** will "butt" a tree—that is, leave an easy trail directly to a large tree, circle to the far side and climb high, then jump as far from it as possible, leaving the dog behind.



hounds the advantage. We decided to travel some 30 miles to Marsh Creek where Mr. Wood's brother was Forest Ranger and was willing to be our guide.

I remember how crowded I was, sharing the back seat of the Ford with three hounds. The Hunter's Moon had barely topped the ridge when we turned them loose. They streamed through the open bar-way of the field and started across the corn stubble toward the woods.

They were but half way across the field when they struck. The race was short and true—but such a chase! The new hound's cry was like a silver bell. That night we hunted with matched voices such as houndsmen seldom hear. Three times they struck and ran

and treed. High tenor, bass and baritone in perfect harmony that matched the magic of the moon. It really was something to hear!

Dawn was graying in the east when we crossed the field to the car. We stood beside the fence and talked awhile before we started home. The talk was that of hounds and other hunts, man talk . . . and they included me. I was no longer just a boy, but one of them. . . .

I shiver with the cold. The Hunter's Moon is high. My father and his friends are gone and yet somehow I seem to be with them once again to listen to the distant cry of hunting hounds. . . . Mine was a goodly heritage!

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**PERHAPS THE BEST DEER HUNTING** average for the past season was turned in by the Ravenstahl family of 303 Hawkins Avenue, Pittsburgh. Hunting near Johnsonburg, Elk County, four bucks were taken, and it's hard to beat that! From left are Daniel, 12, who got a 3-point; Kurt, 15, an 8-point; Bob, 17, a 6-point; and Robert Ravenstahl, a deputy fire chief, who bagged an 8-point.



# Gadgets

## From Deer Antlers

By Gene West



**DEER ANTLERS** were used in making the handles for these hunting knives. This permits a successful hunter to get practical use from his trophies.

**O**FTEN THE DEER hunter will bag a buck, yet for a variety of reasons he won't have the head or antlers mounted. Possibly he doesn't have room for the head, or else it's just a mediocre trophy. However, there are many other ways of utilizing the antlers and have a long lasting memento of the hunt, as well as putting them to good use.

Knife handles are one of the most common, as well as most practical and utilitarian, methods of utilizing them. The home craftsman may, if he so desires and has the capabilities, also fashion his own blade from a file, saw blade, or other piece of steel. However, excellent commercially made blades, in a profuse variety of sizes and shapes, are available at reasonable prices from a number of sources, and

I'd recommend using them, rather than forging your own. Indian Ridge Traders, Box 50, Ferndale, Mich.; Clyde Fischer, Rt. 1, Box 170-M, Victoria, Texas; Dick Van Sickle, P. O. Drawer 3688, San Angelo, Texas 76901, and others will furnish just about any blade you may want. Most of these come with the round tang, which I find to be more practical than the square tang, and many are now available with the guard as an integral part of the blade, eliminating the necessity of fashioning that necessary part of the knife.

Round tangs are designed to go clear through the handle and have a threaded end so that a nut will hold the handle in place. This works fine, but I go a different route. I cut the tang to about a three-inch length, then select a fairly heavy piece of antler and cut it to the length desired for the handle. After determining which end will fit against the guard, I use a power drill to ream out that end of the antler so that the shortened tang will fit into it, with the end of the antler flush against the guard. Some grinding or filing of the antler may be necessary to assure a smooth, flush fit to the guard. I mix a quantity of epoxy glue and liberally coat the inside of the hole with it, then I insert the tang. For a secure job, there should be enough glue that some of it will ooze out when the tang is inserted. This excess is, of course, immediately wiped off. With the antler glued to the blade and positioned as you want it, set it aside and let the glue set. Twenty-four hours is probably sufficient, but I normally wait at least 48, and preferably even 72, to let it set fully.

After the epoxy has fully dried, the



handle is contoured to the blade and to fit my hand. A bench grinder works well for this, though some of the work may require the use of rasps and files. After I'm finished shaping the handle, it is polished. This is best done with a polishing wheel on a grinder, using either valve grinding compound or jeweler's rouge to put a smooth, shiny, professional finish on it.

If I want to dress a knife up a bit, a  $\frac{1}{4}$ -inch or  $\frac{3}{8}$ -inch piece of brass is epoxied to the butt of the handle and finished, contoured and polished as the handle is finished.

### Sawed in Two

With a wide, flat tang blade, the antler must be sawed in two lengthwise, so that half of it will fit on either side of the tang. Holes are drilled in the antler to correspond with those in the tang, and the handle is epoxied to the tang and also riveted through the holes. Finishing is accomplished in the same manner as with the round tang.

Blades without a guard pose a little more work, in that a guard must be made prior to installing the handle. A variety of materials will work for this, but brass stock,  $\frac{1}{4}$ -inch or  $\frac{3}{8}$ -inch thick, is best. I cut a slightly oversize piece and drill a hole through it for the tang. This hole is carefully filed until it fits the tang snugly and firmly and is flush against the rear of the blade. It is epoxied into position, and then the handle is fitted and installed as previously described. When finishing and polishing the handle, the guard is also finish shaped and polished.

These methods have given me a number of attractive, serviceable hunting knives, knives that I use with pleasure, remembering that the handle came from a previous hunt. You can get the same satisfaction by making your own.

Letter opener blades are also available, and antler handles may be fitted to them in the same manner as are knife handles. They are items the

sportsman will use and enjoy on a daily basis.

Attractive and serviceable buttons for hunting or shooting coats or shirts are another way of utilizing your trophy. The part of the antler you'll use will depend upon the size buttons you want. With a hacksaw, cut off slices of the correct diameter, roughly  $\frac{1}{4}$  inch thick. Smooth off all rough edges, and bevel them slightly, using a bench grinder. Then drill two small holes in the center of each for attaching. After polishing, they're ready to be sewn on.

If you wear and enjoy bolo ties as I do, the uses of antlers are obvious. Cut off antler tips to a one-inch or two-inch length, smooth off the cut end and drill a hole into it a half-inch or so deep. Remove the metal tips from the strings on a bolo tie, epoxy the holes you drilled in the antler tips, and fit them on the tie in place of the removed metal tips. They are attractive, as well as a real conversation piece. Most people, on seeing them for the first time, invariably ask what kind of tusks or teeth they are—and most will volunteer that they think they're boar tusks.

Another interesting variation for bolo tie tips is to cut sections of antlers about  $\frac{1}{2}$  inch in diameter and  $1\frac{1}{2}$  inches long, smooth the cut ends, and



**A LETTER OPENER** also can be fitted with an antler handle, particularly one of smaller diameter.



**SLICES OF ANTLER** make attractive buttons for outdoor clothing, left. Above, percussion cap container, bullet starter and powder measures make a set with stag-handle knife.



**CLOSE-UP** of muzzle-loader shooter's accessories, above left. Right, bolo tie tips and holders. Left, for those who have never seen one, a jackalope! Right, antler handle fitted with brass guard and butt.





then drill a hole through them lengthwise. Use a leather thong similar to a boot lace for the string on your tie, and run it through the holes in the antler, tying a knot in the ends to hold the pieces on. To go even further along this line, pieces of turquoise or other attractive stones may be epoxied to the pieces of antler, adding a distinctive touch.

The tie proper may also be made out of antler, cutting a V-shaped piece out of the fork. After that section of the antler is ground and smoothed up a bit with the bench grinder, holes are drilled through it, starting in the center of each of the top parts of the "V," and coming out quite close together in the bottom part. The string, or thong, of the tie is run through these holes, holding the "V" in an upright position. Naturally, this must be done prior to gluing the antler tips on the ends of the thongs if you're making the complete tie with antler. To add an unusual touch, epoxy on a piece of turquoise, an Indian thunderbird or other symbol, an old coin, or anything that strikes your fancy. On a small tie such as this, an NRA membership pin is distinctive; or if you wish, put a pair of these pins on the antler tips . . . the variety of combinations you may use this way is limited only by your imagination!

A great variety of authentic and useful items may be made if you're a muzzle-loading fan. Take a fairly heavy piece of antler some 1½ inches long, and round and smooth all the edges. Drill a ¾-inch hole roughly halfway into it; and then epoxy in a short piece of hardwood dowel. This makes as fine a bullet starter as you'll ever come up with.

Dip measures for black powder are another useful item which can be made from antlers. Use a piece in the smallest possible diameter for the selected powder charge, as it makes it easier to pour into the chambers of the revolver or muzzle of the long gun. Drill the cavity slowly, checking

against a scale until the hole is of the correct size to hold just the amount of powder you want. I use three of them, one for 20 grains, one for 40, and one for 70. The 20-grain size works nicely for my 36 Navy, the 40-grain for the 44 Remington and also for light loads in a 45-caliber rifle, though for heavier loads, I can use both the 20 and 40 for a 60-grain load. For deer loads with the 240-grain cast Minié ball, I use the 70-grain measure. Depending upon guns and loads you use, other combinations such as this may quickly be worked up.

While it's not necessary, I find it handy to drill a small hole through the solid parts of the powder measures and the handle of the bullet starter. Then they are all strung together on a thong which may be worn around the neck or carried in the gadget bag. These items are an excellent way of utilizing antlers in that they're attractive, authentic, yet most functional.

For something entirely different, and as unusual a trophy as you'll ever come up with, how about spending a few dollars and having those little spike or forkhorn antlers made into a jackalope. This entails having the antlers mounted into the head of a rabbit, and it's a guaranteed conversation piece. Any taxidermist can do this, though you'll probably have to furnish the rabbit as well as the antlers. Omar and Rita Swift operate Jackalope Enterprises at Tioga, Pa., and needless to say, jackalopes are one of their specialties. They keep black, brown, and white rabbits on hand at all times, so they can professionally make a variety of jackalopes with your antlers. They do a nice job, and the results are interesting, to say the least.

Gun racks, coat hangers, boot jacks, and a variety of other useful items may be made from those antlers. If you don't want to have the head or antlers of your deer mounted, give some thought to utilizing the antlers in one of these many ways before you throw them away.



N. ROSSETO



*An Old Saying Claims That Anything Which Can Go Wrong Will Go Wrong, and We Found It Was True on Our . . .*

## ***First Time for Beaver***

**By Bill Wasserman**

**T**HE ALARM CLOCK shrieked and I jumped from my warm bed onto the cold floor. Vivid thoughts of furs and trapping flashed through my mind, for it was the first day of Pennsylvania's beaver season. Even with only one hour's sleep I felt fresh and alive as I pushed open a window and peered into February's crisp midnight air. My wife Marianne was preparing eggs and bacon, so I hurriedly dressed and entered the kitchen with a cheerful "hello." She nodded in my direction, a sleepy smile on her pretty face. While eating, I discussed my plans with her and promised to phone each night. I knew she would worry since this was going to be a three-day trip.

The short drive to my twin brother John's home was rather unusual . . . there wasn't any traffic or noise that night. The small town was sleeping and travel was easy. A light was shining brightly through his kitchen window when I pulled up. I tapped on his door, trying not to arouse his family, but his English setter exploded into bellowing howls and vicious barks. Next I heard John's wife Karin shush the dog and start to open the door. Upon discovering who I was, the setter did his usual friendly "war dance" until I reassured him with a pat on the head. John was standing by the kitchen with a cup of coffee in his hand while his eyes strained to stay open. He had been to a farewell party for his employer and didn't get any sleep that night.

We were soon on our way north to Wayne County and a small village called Starlight, about 180 miles from our homes in southeastern Pennsylvania.

The roads were slippery due to freezing conditions following a warming trend the previous day, and as we proceeded farther north driving became progressively worse. Deer and rabbits frequently darted across our path, causing additional problems. Twice we took wrong turns which really slowed us down, but we finally made it to Honesdale and were relieved that a mere 30 miles separated us from our beaver ponds. Those final miles were by far the worst part of

our journey, as the snow became much deeper and the roads much more difficult to follow.

Soon the sun began its gradual sweep across the snow-bound mountains and fields. The temperature moderated into the 40-degree range and the white countryside began to sparkle. Our narrow little road now resembled a bobsled track, for snow was plowed as high as six feet on both sides. It snaked along its meandering course through miles of prime beaver country. In many areas, the road was too narrow for more than one car to squeeze by, but traffic was almost nonexistent so there was little need for worry. Finally our nameless, frozen road shot straight toward some rolling mountains, ambled down a small hill and cut through a timbered valley. It was here that the two beaver ponds we intended to trap nestled, well hidden from passing motorists. Parking facilities were provided by a snow plow that had cut partly through an abandoned driveway. My compact Mustang snuggled in perfectly with little room to spare, and John and I hopped out, stiff from our long ride.

We began loading supplies into the pack-basket for our trek through the snow-laden fields that surrounded the ponds. Our equipment consisted of a half dozen No. 4 Montgomery traps, an ice auger, a good ax, two shovels, some nails, wire and other essentials.

### **Too Good to Be True**

I glanced up at the rich blue sky and remarked how everything seemed "too good to be true" as we advanced toward the drifting fields. My first step off the roadside hill of plowed snow was more of a plunge, as I sank to my knees in the fluffy stuff! John jumped right in behind me and I broke trail for the ponds, a quarter mile away. Having no snowshoes, we expected a rough trip, and we got it. Each step became a deliberate effort as we pushed through the snow at a slow, steady pace. Walking didn't get any easier until we reached the first pond. Its frozen surface was barely covered with snow,

as strong winds had blown most of it off. Here we moved easily and soon arrived at a huge beaver lodge. John slipped off the heavy packbasket with a groan of relief and placed it beside him. For awhile we just stood there gazing at the gentle mountains that eased into a rich blue sky which was filled with puffy clouds.

I began peeling the protective adhesive tape from the auger's precision-honed blade. Without warning the tape suddenly snapped and my thumb slashed across the razor sharp edge. I felt little pain but could see I was cut deeply by the amount of blood I was losing. A sudden angry fear washed over me as I visualized a possible end to our day because of my carelessness. I applied direct pressure to the wound and glanced over at John, whose grave expression showed more concern for my welfare than over time lost on the trapline. We both realized my cut was not a minor affair and began heading back to the car.

### **Closest Doctor**

The closest doctor we knew of was at a small hospital in New York, eight miles away. Once we arrived, we had to wait two hours before I was treated. The doctor gave me four stitches and a tetanus shot, for which I paid \$24. That really hurt!

On our way back to the ponds we stopped at a motel for a room and unloaded some clean clothes and other gear. The place was only a few miles from our trapping area and rates were quite low during the winter months.

When we finally did return to the beaver lodge it was late afternoon and we still had to construct our entire set from scratch. First, in accordance with Pennsylvania laws, we made certain to place our trap not less than 25 feet from the lodge. Then we searched for a location to begin drilling a hole through the ice. We noticed a few chewed branches extending beyond the ice which marked the beaver's feeding area, commonly known as a "feed bed." We decided to place our set between the lodge and the feed bed so when an old flat-tail got hungry and swam toward his submerged food supply, he would undoubtedly spot our bait.

I kicked away some snow as John brought over the blood-stained auger. He placed the blade against the heavy ice and pressed down hard on the top of the crank handle, while I grasped the crank firmly with both hands and turned it. With this method and

plenty of muscle, we were able to bore through 24 inches of solid ice in about 10 minutes. Since the auger had only a six-inch blade, we made four holes for each set. Afterwards we knocked out the center of the ice square with the ax, although an ice chisel would have been better.

While John put some finishing touches to the ice hole, I gathered material for our pole set. I found a suitable dead branch to serve as the pole. It was about five inches thick and seven feet long. After trimming it as smooth as possible, I started back toward John. Along the way I grabbed a sturdy forked stick and cut some fresh, tender maple branches for bait. I took six short pieces the thickness of my thumb and peeled off sections of green bark to reveal the white inner wood. This was done to catch the beaver's eye as he swam about in his dark, ice-choked pond.

All the wood used for my set was dead, with the exception of the bait. Otherwise the beaver might decide to eat the pole or another vital part of the set and ruin it.

With both arms full, I stumbled back to the lodge where my brother waited. I shoved the long pole through the hole until it touched bottom, then pushed it into the soft mud and spun it around so a mark would appear. When I pulled the pole up I could see exactly where to place my trap platform. The trap and bait should be halfway between the bottom of the ice and the top of the mud below. This enables the beaver to have a level view of the bait so he shouldn't pass it by.

My forked stick was placed horizontally on the pole and wired tightly. I wired the trap to the platform just securely enough to keep it from wobbling if the beaver bumped it. Once caught, he could easily pull the trap from its base without destroying it. Also, when wiring the trap, one must be careful not to interfere with any of its movable parts. The trap chain should be pulled straight down and nailed firmly. Next I wired my bait just high enough that it wouldn't clog the jaws as they closed. Finally, I secured an evergreen bough to the pole, behind the trap platform and bait. This will keep the beaver from the rear of the set. As a rule, the beaver won't eat pine or spruce wood and the bough is enough to make him come to the more open section of the set. Also, if the pole is placed in a slight angle facing the lodge, it will further insure a forward approach.

With the completed set submerged and





**THE PREVIOUS NIGHT'S SNOW MADE** the drifts deeper, Several times John sank to his waist in drifts. Trail breaking was tough.

wired to a heavy log on the ice to prevent the beaver from dragging the pole under, we began to cover the hole with snow. This keeps the set from freezing over heavily and prevents light from entering the dark water below. Any unfamiliar light could scare off a wary flat-tail.

The next lodge we intended to trap was on the opposite side of the pond, about a hundred yards away. As we trudged along, we noticed red fox tracks on the snow. The fox had been hunting mice and stopped to dig under a portion of a rotted tree. He then pranced directly to the beaver lodge and pawed around the sides, hoping to discover a sleeping field mouse. Discouraged finally, he left the pond to hunt the surrounding fields.

John and I now gave all our attention to the new lodge. We picked out a likely spot and drilled through the ice. Unfortunately, once we subtracted the ice thickness from our hole, only 12 inches of water remained. This was hardly enough for a good pole set so we commenced drilling a little way farther out. We spent about an hour making four separate holes in the ice and still the water was too shallow wherever we drilled.

By then darkness was setting fast, so we reluctantly decided to call it a day. The

walk back to the small country road seemed longer than before, even though we had worn a trail through the snow. We were tired but already felt the anticipation of what tomorrow might bring. As we walked, dusk hovered above, only to be shattered by splashes of brilliant red sunset. The little Mustang hopped over hidden bumps and ruts on its journey to the motel and the pains of our day melted into fond memories, never to be forgotten.

That evening after dinner we retired early. Each of us had been up for 36 consecutive hours, excluding the one hour of sleep I had the previous day.

When the alarm went off at 5:30 Sunday morning, John and I almost leaped out of our beds. The excitement of our waiting trap made us dress hurriedly. As I stumbled about in the dark room searching for my small travel bag, John turned on the light. Simultaneously I found the bag and grabbed inside for my toothbrush. Instead, I jammed my finger into the corner of my razor blade and severed a chunk of flesh. Now I was really awake and so was John after I loudly explained what happened. I crudely applied some first aid to the wound and the bleeding subsided shortly.

When I opened the front door, I was

slapped in the face by the cold morning breeze. The air was so clear and light it seemed to force its passage to my lungs. What a pleasant difference from the smog I inhaled back home.

After scraping the frost from the car windows, we jumped into icy seats and were ready to go. But when I turned on the ignition, the car just wouldn't start! We did some investigating and surmised our problem was a frozen gas line. Nearby stood two lonely gas pumps, so after obtaining permission from their owner, we borrowed about half a cup. This was just enough to remedy our situation. We poured it down the carburetor so it would filter through and defrost the gas line. Unfortunately, we had run down the battery while trying to start the car. The only thing we could do now was turn to the owner of the motel for help. He and his wife were glad to assist us and in a short while, with the help of his jumping cables and Jeep Wagoneer, we were on our way.

Two happy trappers once again began to snake their way over narrow, unnamed roads, to the ponds. When we reached our little parking spot we became aware that something seemed different. It was the weather. There was a stiff wind from the north and it was much colder than the day before. The sky was shaded gray and the sun was simply a faintly glowing light, lost in dense haze.

### Trail Packed

The walk to the pond was more pleasant now because our plowed trail was well worn and packed hard through the drifts. As we crunched through frozen snow on the pond, the set became more visible. This was the first time in our lives that we were about to check a beaver set. We felt it was constructed perfectly and were in high hopes of a catch. In fact, we both had dreamed of a beaver in our trap.

Our eyes strained to detect if the pole had been moved by the struggles of a beaver below the ice. Approaching the set, I felt my heart pounding as I took my belt ax and chopped at the fresh covering of thin ice. I hacked out a small opening and looked in. There was no guessing, the water was as clean and clear as spring rain. The trap we had come so far and waited so long to check was empty.

For an instant I felt a heavy sadness. Then I looked up to the vast countryside, clothed in its sleepy blanket of snow. I glanced at

John and he was admiring the surrounding beauty also. We both knew this was only the beginning of a great day, we still had a chance for a beaver yet, so we started working at it.

We trotted across the pond and pushed through some drifts until our second location was reached. Now our problems really started. The pond was already being trapped and was covered quite well. Since it was the only other area we had left, John and I decided to make a second set by the first lodge and try to locate another place to trap later.

We made the set a few yards away from our first trap, toward the rear of the lodge and out of sight from the original trap so it wouldn't arouse a curious beaver's suspicion. Being slightly experienced beaver trappers now (very slightly), the set went together smoother and faster than before. Just as I was putting some final touches to the pole, I heard a noise. It was a faint chopping sound! I stopped working and signaled John to listen. At first we couldn't determine where the noise came from but soon realized it was produced from inside the adjacent lodge. It was actually the sound of a beaver, gnawing away on his wooden lunch. This really perked up our hopes as we quietly concluded our set with confidence of a catch in the morning.

The remainder of our afternoon was spent exploring many new miles of terrain for trapping grounds. We roamed aimlessly over countless winding, narrow back roads to no avail. With so much snow, it was difficult to distinguish a lake or pond from an open field.

As darkness began settling, we stopped by a small swampy pond near the road's edge. I volunteered to prospect while John stayed with the car so he could move it if another came along. In no time I was camouflaged by the thick growth of mountain laurel and tall oak trees that blended with the pond. It became so quiet, the only sound that reached my ears was the dull thud of my heavy boots, as I inched through the restricting snow. Big, lazy flakes of clean white snow dropped silently through the still night air. It started to fall so fast my vision was cut to a minimum. I could barely make out a lodge on the opposite end of the pond. As I worked through the knee deep snow toward the lodge, I found a trapper had already been there and completed two pole sets. This particular trapper was traveling in style. He had a snowmobile



which grooved a well packed trail across a bordering field that led back to the road. I followed it and ended up about 25 yards down the road from where John waited. By then darkness was pressing hard and the snow was falling in a fine, steady spray. It was so peaceful there I could hear the flakes tap against the roadside laurel bushes. We knew it was time to head back to the motel. The two beaver sets we had out would have to be sufficient, as there was no time left for more. Since all we really wanted was just one beaver, we did have at least a fair chance.

Later that night the roads became slippery and by dinnertime two inches of fresh snow covered the ground, with no sign of a halt. We realized this could turn into a terrific storm and hoped we wouldn't have trouble checking our traps and getting home.

The next morning we were up early. I looked out the window of our room. It was too dark to tell the snow depth so we dressed and went out. The sky was still gray but the snow had stopped. Eight additional inches of snow had fallen and the plow already had cleared the road.

Once again we were stricken by bad luck. When the plow swept past our car it almost buried it in snow! We had parked in a small open spot between two snow piles. Each pile was about six feet high and the only way out had been backwards. The plow had pushed snow over the car, sealing it in. The doors were blocked with snow clear up to the windows and both shovels were inside! John and I began kicking it away and finally managed to open a door far enough to pull out both shovels. After a half hour of digging we were on our way to the pond.

With the new snow the roads were even narrower than before. And when our road forked left, the plow went right, and never cleared it. We had no choice but to dig out a parking spot where the roads branched. There would be room for the car and the plow would probably still get by. We had about two feet of old snow and eight inches of the new powder to cut through before we eased the car in.

We grabbed the packbasket and ax from the trunk and started down the snow-

covered road to our pond, a quarter mile away. About halfway down the road we decided to take a short cut across the field instead of using our regular trail. We soon found out the snow was much worse, not only from the previous night's accumulation but also because the drifts were deeper. Twice John sank to his waist in drifts that covered low spots in the field. Trail breaking was really tough and by the time we reached the pond we were both wet from perspiration.

All our struggling was forgotten as we approached our two sets. Thoughts of the day before, with the beaver munching away on branches in his lodge, tugged at my mind. My hopes for success soared. Then suddenly we were standing there, alone in front of that big lodge. It was so still, so like a rock, so unrevealing. The bleak sky shadowed over us as the wind swirled traces of fine snow in our faces.

### Heart Stopped

I chopped away at the young ice from our first set and my heart must have stopped for an instant. Sullenly I peered into an empty trap and uttered my find to John although I'm sure he was aware of the verdict. It was now his turn to check a trap, in this case, our final one. Our last chance for that long-awaited catch. Slowly he broke the ice from the hole until he was able to see the set. After awhile he looked up. He didn't say a word. I could see in his eyes that we had failed.

We packed our gear and pushed wearily to the road. Neither of us said anything as we threw our supplies into the trunk and slid reluctantly into the car. Silence prevailed as we bounced down the country road toward the highway and home.

I began thinking to myself that trapping is just that type of sport, rugged and unpredictable. One never really knows how good or bad a trapline might turn out to be. The average trapper's fate is laced with unsuccessful days and often rewarded with pint-size profits. But then there are those glorious days when every trap connects or "Old Three-toes" is finally yours.

All at once I realized how many beautiful memories I had and was glad to know more were to come. I wondered if John felt the same way and was about to ask him when he said, "Don't feel too bad, Bill, we have plenty of traplines ahead and plenty more furs to stretch. After all, this was only our first time for beaver."

**Give Game News  
to a Friend**



**BALLISTICS EXPERIMENTER Ed Yard measuring both velocities and pressures obtained with imported black powder.**

## **Black Powder Hunters Need A NEW BOOK**

**By Edward M. Yard**

*Photos by Carole Ann*

**B** LACK POWDER NOW reaching hunters and shooters is not the same as the Dupont Fg grades you are used to shooting. Dupont no longer makes black powder for sporting purposes. The Austin Powder Co., the Hodgdon Powder Co., and C-I-L (Canadian Industries, Ltd.) Ammunition, Inc., import and distribute with their own labels a powder made in Scotland and sometimes referred to as Curtis & Harvey. This is made by Nobel Division of Imperial Chemical Industries in Stevenston, Ayrshire, Scotland, by the old Curtis & Harvey formula. Dupont stopped black powder production because of an explosion that wrecked their Moosic, Pa., plant in mid-1971. It is not economical to rebuild it and resume production.

At present you are offered three

granulations of the imported powder, but a fourth size will be shipped. These grain sizes do not match the old Dupont ones. The new powder is slower burning although almost the same in chemical composition. Old loading data does not apply. So we will here supply as much new data as possible for this imported powder and new situation.

The story being passed around that Dupont will offer a bulk type smokeless to use in muzzle-loaders instead of their discontinued black powder has been denied by their Explosives Department, so there is no choice but to learn the nature of the foreign stuff.

Fortunately, if the correct granulation of this powder is used, the same charges formerly used for Dupont are suitable. Many shooters will only know



their velocity is not so good because they read it here. They probably won't feel anything different, but they will have to raise their sights more for long range. Along with the lower velocity there is lower pressure too, so loads may sometimes be increased. Heavier charges often aren't safe to increase, or if increased still do not equal ballistics from Dupont's powder.

Let's deal with the granulation problem, because using the wrong one can lead to high pressure. This isn't guesswork; some were measured. See "Designations" table on this page for suggested usage.

Even though the descriptive designation and familiar looking letter codes used by Austin, Hodgdon, and C-I-L imply it, they do not directly replace any Dupont grain. Some care must be taken to grasp the difference. While the substance is slower burning, the two most used grainings are finer. They can give high pressure. We will go over the application of each.

The Musket & Shotgun, F and Fg, may be substituted for Dupont Fg in the same charge weight for lower velocity and less pressure. Muskets and shotguns are not as strong as rifles, so use caution and judgment in any attempt to improve results with it. This powder looks coarser than Dupont Fg, but it is slower burning.

The Austin Rifle, Hodgdon FF and C-I-L FFg are finer grained than Dupont FFg, but slower burning. They could possibly give high pressures in large bores. They should be considered to replace the erstwhile FFg, but keep loads moderate in the bigger guns,

shotguns over 12 gauge, and old muskets.

The Austin Pistol, Hodgdon FFF and C-I-L FFFg are finer than Dupont FFFg, almost as fine as FFFFg. We measured erratic and high pressures with it in 40-, 45-, and 50-caliber rifle barrels in heavy loads. The best advice is to use it for pistol loads, revolvers, small bore rifles in light loads and shotguns under 14 gauge for light loads. Do not use in 12 gauge or larger shotguns, or in muskets.

Austin Pan Powder, Hodgdon FFFF, and C-I-L FFFFg are finer than the former Dupont FFFFg, being 70 mesh down to dust, and may be used only as priming powder for flintlocks. They have no use in guns.

**No Warning**

The muzzle-loader shooter gets no warning, as a breechloader does, from case, primer and extraction, that pressures may be high. An accident is often the first sign. When the too-fine powder sizes for an application are loaded in heavy charges, we have proof in data tabulated herewith that high pressures do occur.

When the proper granulation is used in normal loads, this powder is tolerant of the usual charge weight variations. Even in moderate overloads, pressure increases only moderately, velocity equally sluggishly. It is the granulation that makes the difference. Bear this point in mind. Reasonable care should be taken in measuring powder charges, of course.

In all black powder muzzle-loading shooting, the charge used varies from

Designations			
Austin	Hodgdon	C-I-L	Application
Musket & Shotgun	F	Fg	Muskets, large bore rifles and shotguns
Rifle	FF	FFg	Rifles to 55-Cal. and shotguns
Pistol	FFF	FFFg	Pistols, small bore rifles and shotguns
Pan Powder	FFFF	FFFFg	Priming powder for flintlocks

shooter to shooter and gun to gun. There is no fixed rule. If you have done enough shooting to know what loads for Dupont powder worked well, then try the same and try working up toward 10 percent more. Be sure the powder is in the right grade for your application.



**READYING PRESSURE GUN for test shot. Note rugged steel machine rest which assures proper alignment of Hawken barrel with chronograph screens.**

The beginner may consider "normal" loads to be 50 percent of ball weight in 46- through 55-calibers, but not the Civil War 58-caliber muskets. For 45 caliber down, try 60 percent of ball weight. In the muskets use tables giving the old regulation load in the 60- to 80-grain range. In trying various loads to see what suits, changes of one to five grains in small bores, two to eight grains in the larger, make only minor differences in ballistics. Small changes mean so little ballistically, you should choose for accuracy.

Blank loads — "salutes," where no wad or projectile is put in the bore — can produce serious pressure in these guns, enough to damage a musket. If readers fire such loads, keep the charge down to the least that makes an ac-

ceptable sound, not too much more than a normal ball load. Depending on the load, pressure can be 3000 psi to 5000 psi, checked with pressure gun.

By the time this appears in print, some early confusion about grain sizing and designation, resulting from inaccurate information and poorly and unmarked packages, should be past. Nevertheless, we include a tabulation of direct-from-the-factory size data. If you have some of this poorly identified stuff, compare it to samples of known powder; using our earlier descriptions, you should be able to grade it. The priming or finest grain really looks like dust.

### **Less Fouling**

The imported ICI powder is generally thought to produce less fouling of the bore than some other black powders and this is softer so that successive balls may be loaded somewhat more easily and cleaning problems are reduced. Being a tight patch man myself, this doesn't thrill me. After a second ball I clean.

The real idea is that the fouling is different and cleans out easily right away. If shooting at a range or in the field, clean up there for at least a field job. Finish the job at once when you get home. Do not let a gun go uncleaned overnight. Everyone knows rust can form fast in humid weather with black powder fouling. With this powder there forms overnight in the bore a tough and adherent film that I call waxy and, cuss as you or I may, it comes out as tough as it is. It will pay to use four to six swabs with a really wet patch, and then dry with two dry paper wads. My own home and field cleaning methods have been in use for about 30 years. If enough of you write the editor, he might ask me to submit them. They work.

Most target shooters wipe out fouling between shots using a patch wet with Hoppe's, Hodgdon's or other cleaner, and then finish with one or



more “dry” patches for a supposedly dry bore. For my pressure and velocity test shooting with this new powder, I did substantially the same thing, just a little more elaborate in both phases, and I found that target shooters and ballistic testers can get careless. We both go through “drying” steps, but quality control flopped. We were neither of us dry—just damp.

And that can mean up to a 15 percent velocity variation. I have stated that figure before in this publication when writing of handloaded ammunition. (See “Handloaders Need Chronographs, April, 1971, GAME NEWS, p. 26.) This figure is completely independently observed with the black powder percussion guns when the barrels are not really dried. Extensive previous ballistic work proves that such velocity spread involves hangfires and can have misfires in a series of shots. Accuracy suffers with this condition.

Noting this velocity variation (and

**The Game Law  
Violator Is  
Stealing From  
You!!!**

this is one of the nice things a chronograph will do for you), the cause was identified. A more scrupulous drying of the cleaned bores brought the spread to three percent, a figure as good as cartridge ammunition can achieve. The percussion cap is not much of an igniter. It cannot clear away much debris, so moisture or other fluid or fouling in the breech plug area or in the flash hole will cause hangfires or misfires. I have witnessed many misfires that I feel sure were caused by failure to dry the bore after a field cleaning.

There is the question of charges for Minié balls. These are of greater sec-

**Comparison of Dupont and ICI Powder**

Dupont		ICI	
Granulation Designation	Sieve	Granulation Designation	Sieve
Fg	12 x 16	T. P. Cannon	8 x 20
FFg	14 x 30	F	18 x 24
FFFg	20 x 40	FFF	24 x 70
		Priming powder supplied as everything passing 70 mesh	
KNO <sub>3</sub>	74.0 ± 1.5%	75.0 ± 1.5%	
Charcoal	15.6 ± 1.0	15.0 ± 1.0	
Sulfur	10.4 ± 1.0	10.0 ± 1.0	
Moisture	0.85% Max.	1.2% Max.	
Spec. Gravity	1.72-1.80	1.70 Min.	
Burning Speed (lead fuse)	75-85 sec./yd.	90-100 sec./yd.	

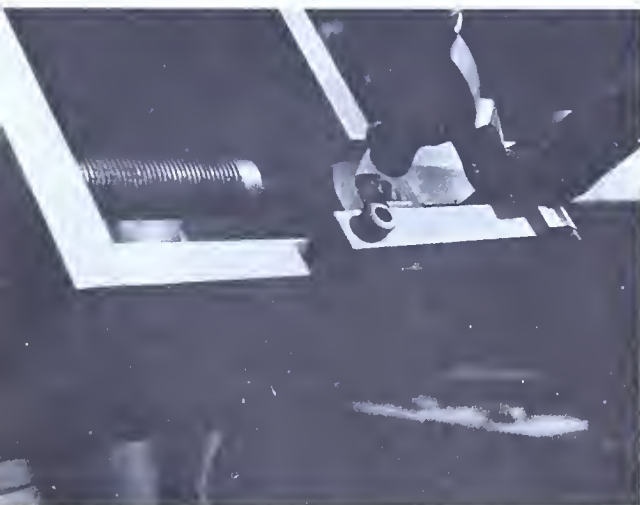
ICI believes their two “F” grades may be used in substitution for Dupont FFg and FFFg without noticeable difference. ICI powder is reported to produce less fouling than Dupont. It has a graphite surface glaze.

How this will be packaged and marked by the three known importers—Austin Powder Co., Hodgdon Powder Co., and C-I-L—remains to be seen.

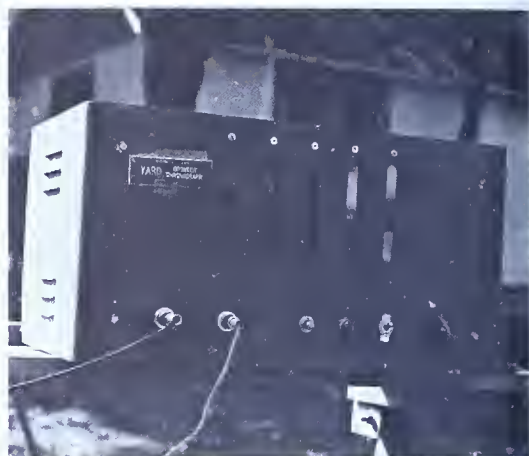
tional density than the round ball. This factor calls for a lighter charge of coarser powder than round balls. Using Musket & Shotgun, F, or Fg in the same charge that shot well with Dupont Fg should do the trick. The new powder is finer in the Rifle, FF and FFg sizing than Dupont FFg. We advise against its use.

If, as I have done, you come across printed instructions suggesting loading two round balls with 100 grains of Dupont FFFg in a 45-cal. rifle, *don't do it!* I feel certain it will give high pressures. One ball gives 9100 LUP and the two-ball load will give at least double that amount, which is too much. With the new powder, that load could jump to 30,000 LUP with two balls. That would wreck the lead crusher test breech, so the test has not been made. We may be able to check it later with a different unit. Incidentally, the two balls separated quite a bit, usually, when tested with lighter loads.

After correcting the "dry" bore thing, we noted that for reasonable charges of the correct grain size, black powder loads are quite uniform from shot to shot. It is not unusual to get



**BOX-LIKE YOKE** welded to gun breech plug holds threaded anvil, left, and crusher, center. When fired, piston forces crusher against anvil, and the amount of compression is translated into pressure units.



**COUNTER CHRONOGRAPH** which splits a second into 100,000 equal parts and shows results was used to measure velocities.

three or even four identical readings in a 5-shot string, the odd balls being only 100 or 200 LUP's away. The more uniform the pressure the more uniform the velocity, in dry bores. Where there is more scatter in both quantities, usually, but not always, the high pressure is on the high velocity shot. I have seen all in a 10-shot string sort out that way on my equipment.

The load data accompanying this article was developed with modern counter chronographs, standard pressure gun and accepted techniques. It covers a good range of rifle calibers and should serve as a broad guide for load selection. The data was worked up to form the factual basis for a black power guide for Thompson/Center Arms Hawken rifles. The tests were made in Hawken 28-inch barrels and pressures taken using Remington lead crushers and a pressure breech Thompson/Center made to fit their barrels.

This is your New Book for shooting with ICI black powder, sometimes called Curtis & Harvey, and made by their formula reaching you under Austin, Hodgdon and C-I-L labels, imported from Stevenston, Ayrshire. This is believed to be the only comprehensive review and update at this time.



## Black Powder Rifle Ballistics

POWDER:		Rifle or FF		Pistol or FFF*	
Cal.	Charge Grains	Velocity FPS	Pressure LUP	Velocity FPS	Pressure LUP**
36	40	1455	3900	1720	6500
	50	1630	4400	1880	7000
	60	1800	5000		
	70	1880	5000		
40	50	1550	4900	1795	6500
	60	1665	5100	1870	7000
	70	1770	5500	Pressure jumps to 11,000	
	80	1870	6000		
	90	1920	6500		
45	70	1425	4400	1640	6200
	80	1550	4700	1750	7000
	90	1665	5000	1860	7500
	100	1815	6000	Pressure jumps to 14,500	
	110	1920	7000	One shot 20,000 LUP's damage to pressure gun.	
50	80	1440	4300	1560	4900
	90	1500	4600	1625	5200
	100	1560	4700	1690	6000
	110	1625	5000	1775	6800
	120	1690	6000	Pressure jumps to 10,000	
	130	1750	6500	Not tried	

Dupont FFFg			
45	60	1720	5700
	70	1820	6700
	80	1920	8600
	85	1960	9100
50	80	1770	6700
	95	1950	8500

This information is presented for the reader's interest. It was assembled by a researcher of much experience, using recognized industry methods. However, many variables exist in this field, and no responsibility is assumed by the writer or publisher for problems resulting from its use.—Ed.

\*See text. This ICI FFF powder designated "Pistol" by Austin and "FFF" by Hodgdon is not well adapted to heavy loads in rifles. It should be restricted to moderate loads if used in rifles at all.

\*\*For many years, breech or chamber pressures of firearms have been listed in pounds per square inch (psi), the data having been derived, for the most part, from use of copper crusher gauges. Because several other methods of measuring pressures have become fairly common recently, it is more informative to indicate which method was used during given testing. LUP's, as listed here, are lead units of pressure, indicating a standard lead cylinder was used in a conventional yoke for each shot, its compression under firing indicating the pressure level. Lead units serve well at the comparatively low pressure levels of black powder, but are not suitable for high pressure smokeless powder testing.

Velocities are for a 28-inch barrel. Calculations based on these data indicate velocity would rise about 7½ fps per inch of greater barrel length and fall about 10 fps for shorter barrels, to a length of about 20 inches.

# THE LITTLE LICHEN

By William Wagner

**T**HE NEXT TIME you're out in the woods, stop for a minute and look under your feet. You may be in for a miniature surprise. You see, it's easy to miss one of the smallest and most interesting plants that exist, the little lichen.

These humble plants engage themselves in monumental tasks. Their chore is to blanket the arctic and alpine wastes and start the conversion of barren rocks into fertile landscapes. They require no soil—only a foothold. In fact, they create soil for other plants. By secreting strong acids, they cause rocks to crumble. The loosening particles admit rain water which freezes in winter, and expanding ice breaks down the rocks further.

Lichens can survive for centuries, but even after they die, they prove useful, giving their decaying bodies to nourish life forms larger and smaller than themselves: flowers, ferns, mosses and bacteria.

## Reindeer Moss

Reindeer and caribou feed on lichens called "reindeer moss." Iceland moss, also a lichen, is even food for man, as are certain rock tripes in Japan. Although lichens are considered to be bitter famine food, they have sustained life in the bodies of lost and helpless men in the wilderness until help came.

But lichens are beautiful, too, adorning rocks and trees splendidly with their chaste embroidery-like designs. Their delicate lobes may branch as lavishly as ornaments on a marble temple, whose very design, perhaps, the sculptor borrowed from the temples of nature.

Lichens are similar to moss, but unlike true mosses, they do not have green leaves and are not usually green

at all when dry, but are often brown, gray, orange-yellow, black or white. Their forms are so varied that words cannot adequately describe the more complex and elaborate of them.

Some characteristics, however, are common to all, one of the most important being the absence of true veins or roots. What are called veins in some species are merely ribs which support and strengthen the spreading parts, while what appear to be rootlets are simply "holdfasts." Water is not drawn up as sap through any tubular system, but is soaked up as by a sponge.

Lichens in the desert may dry up completely for several years, but a rainfall will bring them to life and they will, once again, assume their normal colors.

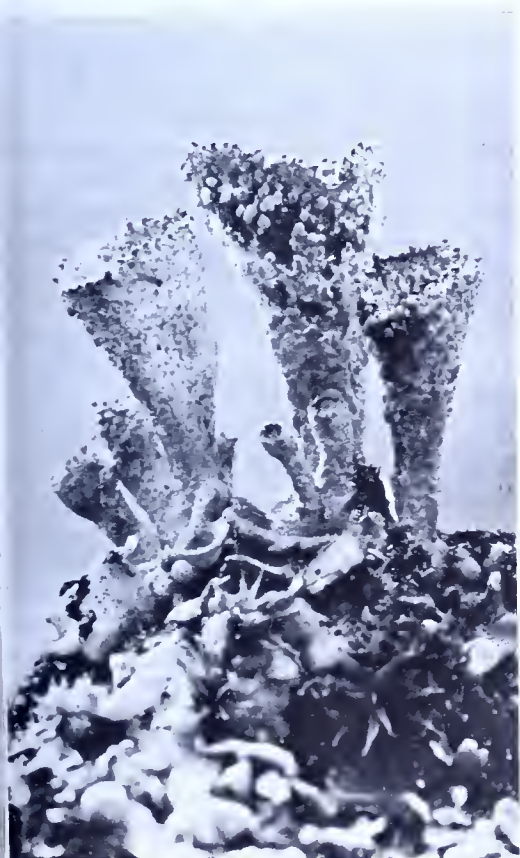
Lichens are actually fungi of a sort. But where fungi prey on and destroy living and decaying animal or vegetable matter (having no other way of getting food), lichens, by contrast, are "farmers." They cultivate certain small algae without killing them, giving protection in exchange for a portion of the food produced.

Actually, the lichen is two plants in one. Only the colorful algae is seen with the naked eye, but with the aid of a powerful magnifying glass or microscope it is possible to see the colorless fungi entwined through the algae like a fine thread.

Liverworts and mosses often grow with and upon lichens, and lichens often grow with them or tangle among them. The lichens in these cases can be recognized by their lack of green leaves and true cellular structure.

Some of the smaller fungi on tree bark and rotten wood, however, so closely resemble lichens that the question remains as to whether some of





**CLADONIA VERTICILLATA** (ladder lichen), above, found in most of U. S., usually on ground in shady or swampy areas. May grow several "stories" high.

**CLADONIA CRISTATELLA** (British Red-coat soldier lichen), above left, found on dead wood, tree bark and rocks in much of U. S.

**CLADONIA CHLOROPHAEA** (mealy goblet lichen), left, is found throughout U. S. on stumps, logs, rocks and tree bases. Many shapes and sizes.

them are lichens or not. The only positive test is to examine the parts under a microscope to determine whether any of the fungal threads intertwine and form a connection with the algal cells.

Each species of lichen can, nevertheless, be learned by its physical appearance under a hand lens, which should leave very few cases in doubt. Generally speaking, growths which protrude between torn edges are fungi. Those which rest on the bark without any evidence of protruding through are lichens. The growing parts of a lichen are normally seen on the surface of soil or bark. Fungi rarely grow on rocks, while lichens commonly do.

#### **Abundant on Mountains**

Lichens grow abundantly on mountains both above and below timberline, cloaking trees, branches, twigs, logs, rocks and bare earth. They are also plentiful in bogs and barrens. Almost any woodland which has not been cared for or burned within 10 years will yield a number of species to the dedicated searcher.

Along old, neglected roadsides, trees and banks become encrusted with lichens of several varieties. The wooded banks of streams, rocks protruding from the waters and unplowed and unburned fields produce many forms. One type that is quite plentiful is *Cladonia cristatella*, commonly known as British red-coat soldier lichen. It is also among the easiest to recognize because the fruiting tips are bright red when there is plenty of moisture; the tips turn brown during a dry spell. In areas where frost coats the ground, one may find lichens delicately encased in ice.

Lichens cannot exist in the neighborhood of large cities, in polluted air filled with smoke and gas. Very few are to be found in fertile soil where vegetation flourishes lush and rank. Rather, they inhabit waste places, preferring exposure and sunlight. They are especially luxuriant in spots mois-

tened daily by dew, fog or spray. Smoke and fire are their worst enemies.

For a field study of lichens, only a hand lens and a millimeter scale are necessary. To collect them for additional study, a sturdy knife will usually do for those growing on bark. For most rock lichens, a hammer and chisel are necessary, and with practice, the collector can chip away particles of even the hardest stone.

Lichens which grow on rotten wood and in soil are easy to gather, but sometimes a problem to preserve. The soil at the base may keep falling to pieces as the specimen ages, covering it with dust and making it unpleasant to handle. To eliminate this, the excess soil should be sliced thin with a knife before drying. The remaining base, as soon as dry, should be moistened with glue which has been thinned with about 10 times its volume in water. The dry earth will immediately soak up enough glue to keep it compact indefinitely.

Some scientists are of the opinion that a plant similar to the lichen could exist on Mars. Astronomers have observed that during the summer period, the area between Mars' ice caps is a greenish color. It is possible, these scientists believe, that this color might be caused by plant life similar to lichens.

In his studies, the beginning botanist may experience some difficulty with the names given to lichens. Although the common names for lichens throughout the United States remain much the same, a few lichens of the north have names which tend to confuse. For example, the "reindeer moss," which plays an important role in the migratory habits of the caribou, is actually a lichen. Because it takes about seven years for a new crop to grow, the herd must move constantly in search of a new field.

Lichens are, without a doubt, one of the most interesting and little-studied plants known to man.



# The Last Two Weeks of March

By Nick Sisley

**D**OG TRAINING season ends on March 31 at 9:00 p.m. It's been a long winter, with most bird dog owners in the doldrums of limited or no activity. A top game bird for training, the woodcock is all but forgotten at this time of year by most bird dog owners. Yet his close sitting qualities are unparalleled. Once pointed, he often sits patiently while handlers soothe, steady, and style up their canine students.

In small segments, occasional woodcock start returning to Pennsylvania soils the last week of February. Migration flights continue to increase in tempo until, by mid-March, it is almost certain you'll find several birds in your favorite coverts.

Though leaves will be missing from trees and brush, woodcock habitat is almost too thick to observe working dogs. Attach a bell to your charge's collar. He'll be much easier to keep track of. When he points, you'll know it immediately.

A stake and lead are useful training tools, too. Ideally, brace a young pup with an older, trained dog. Young pups usually have strong backing tendencies. Once a young pup is pointing or backing, get to him quick. Snap the lead on his collar and tramp the stake into the ground. This leaves both hands free to handle the dog. When the bird flushes, the common tendency is to chase, but the pup is jerked down in no uncertain terms when he reaches the end of the lead. A few such lessons and he gets the idea of staying steady to flush. A blank training pistol fired



**BELL ATTACHED TO dog's collar is invaluable for keeping track of him in thick cover.**

after the flush helps steady your pupil to shot.

Woodcock are present in ample numbers if you take the trouble to familiarize yourself with their preferred habitat. For training purposes, these long-billed upland game birds are ideal. The spring field trial season is just around the corner. Get the jump on your competition during the last two weeks of March by training on the returning woodcock. Even if you're not a field trial man, polishing touches are guaranteed to improve satisfaction with your gun dog.

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## Additional Acres for Public Hunting

The Pennsylvania Game Commission has approved the purchase of an additional 517 acres of land to be used for public hunting. The tracts are in Butler, Crawford, Greenc, Huntingdon and Northumberland Counties. Monies for the land acquisitions, which total \$31,044, will come from the Game Fund.



*Photo by Leonard Lee Rue, III*

**AERIAL FEEDING OF DEER** is favored by some sportsmen, but investigation indicates it is of little help to hard-pressed whitetails.

## Winter Feeding Deer by Air How Good Is It?

By Bill Drake  
PGC Wildlife Biologist

**W**INTER can be tough. For white-tailed deer in Pennsylvania, however, it's not only tough, it's often a rigorous test of survival. In this battle for survival, the name of the game is food—nutritious food—and plenty of it. If deer can get enough to eat, they can take the worst weather that winter's got and make it to spring in good shape. But if food is limited, they have real trouble.

Several conditions create problems for our deer herd. When winter conditions get rough, deer tend to concentrate in certain areas. Only a given amount of food is available. When the wintering population is high and heavy snowfalls occur, available food is fur-

ther reduced and there may not be enough to go around. In these circumstances, a heavy winter loss of deer can occur.

Many individuals and sportsmen's groups try to remedy this situation by providing supplemental food in areas where existing supplies may be inadequate. Different kinds of food are often distributed by various methods. One method used considerably in recent winters is air-dropping. This technique is often used where large areas are thought to have insufficient available food and in areas where access on the ground is difficult. Ear corn is by far the most common food dropped. Several types of aircraft have been



used, including light single engine planes, military transports, and helicopters. The ear corn is shoveled out of a bay door, dropped in paper sacks, emptied out of bags, or even thrown out individually by hand. Ear corn is generally more widely scattered and more often buried in snow when distributed by this technique than with other methods.

Considerable time and money have been expended on aerial feeding. Results were often difficult to evaluate, and continuance of the technique has been justified on the basis that something was being done and this was better than nothing. To assist individuals considering use of this technique, a study was conducted during the winter of 1970-71 to determine how effective the aerial distribution of ear corn is in benefitting deer.

### Procedures

The study took place in the Meade Run Drainage of the Allegheny National Forest in southwestern McKean County. Winter weather conditions in this area are among the most severe in the state. Two sites were selected for the study. Study Area 1 was situated at the highest elevation in the drainage. Little shelter was provided by surrounding topography. Suitable vegetative shelter in the form of hemlock occurred in the northern half of the study area. The southern half had only mature hardwood species, providing little shelter.

Study Area 2 had some shelter from surrounding terrain, as it was located in a stream bottom situation. Meade Run flowed through the middle of the study area and may have had a moderating effect on temperature. In addition, sufficient hemlock occurred throughout the area to provide adequate shelter.

Since the actual condition of the corn after being air-dropped depends upon so many variables, it was difficult to determine what condition might best simulate a true "average situa-

tion." Therefore, corn was distributed in this study in a manner intended to approximate an actual air-drop situation.

Each study area was two acres in size (66 feet wide by one-fourth mile long). Two bushels of ear corn were scattered in each area. The location of each ear was marked by a piece of plastic tape on nearby vegetation. Each ear was systematically placed approximately 20 feet from all others. Each was tossed into the snow to an average depth of three to six inches, so as not to be visible.

The corn was distributed in severe weather during the first part of February, 1971. Inspections of the study areas were made about once each week until snow had completely melted in the spring. When an ear was eaten, use was credited to a particular species on the basis of tracks in the snow, droppings, condition of consumed corn, and removal of ears from their original location. Where any doubt existed, use was assigned to the "unknown" category.

### Findings

Use of ear corn by wildlife in the study areas is shown in Tables 1 and 2. During the early portion of this study, patterns of use were similar in both areas. Weather was severe and use of the corn was limited. During the last week in February, the weather moderated and 30 to 50 percent of the corn in both areas became at least partly exposed toward the end of this warm spell. Although use increased in both areas during this time, the increase was slight. Corn was again covered by snow during severe weather in the first part of March. There was almost no use in either area during the first two weeks in March.

Although snow conditions were similar in both areas, use began to vary widely between them by the third week in March. Raccoons had emerged from hibernation in Study Area 2, and although the corn was still buried in

**TABLE 1**  
**Wildlife Utilization of Ear Corn Distributed in Study Area 1**

<i>Date of Inspection</i>	<i>Number of Ears Eaten by Species</i>					<i>No. of Uneaten Ears</i>
	<i>Deer</i>	<i>Mice</i>	<i>Raccoon</i>	<i>Others</i>	<i>Unknown</i>	
2/2/71	0	0	0	0	0	242
2/8/71	3	3	0	0	0	236
2/16/71	0	0	0	0	0	236
2/22/71	3	0	0	0	0	233
2/27/71	0	0	0	0	0	233
3/2/71	1	2	0	0	0	230
3/10/71	0	0	0	0	0	230
3/15/71	0	0	0	0	0	230
3/22/71	0	0	0	0	0	230
3/25/71	0	0	0	0	0	230
4/3/71	1	10	0	0	1	218
4/8/71	83	20	0	0	13	102
4/16/71	64	11	0	0	15	12
Totals	155	46	0	0	29	12
Percent of Total Ears Distributed	64	19	0	0	12	5

the snow, they began finding and eating it. By the time ears were becoming exposed by spring thaws in Study Area 2 (approximately April 4), that corn which had not been eaten during the winter by mice had been consumed by raccoons. As a result, deer ate very little of the corn distributed in Study Area 2.

In Study Area 1, use of corn remained low throughout March. Raccoons were not known to frequent this area and when the ears were exposed by thaws, most were uneaten and still in good condition. As weather conditions moderated, deer began to move freely once again and systematically ate the remaining ears as they became exposed.

Use of corn by mice was probably fairly constant throughout the study period, although most of it occurred under the snow where it wasn't detected until the ears were exposed by spring thaws. Since the corn was usually buried or eaten shortly after exposure, use by songbirds was limited to cleaning up what remained after consumption by other animals. If use

by gray squirrels, red squirrels, or chipmunks occurred, it was not detected or recognized as such. The four ears assigned to the "others" category in Table 2 were eaten by turkeys (3 ears) and a fox (1 ear). By April 16, utilization of the corn was 95 percent in Study Area 1 and 99 percent in Area 2.

#### **Discussions and Conclusions**

The most important information learned from the two situations studied was that deer used very little ear corn when it was scattered and buried in snow. In Study Area 1, deer did eat a large part of the corn but the use didn't occur until it was exposed by spring thaws. In Study Area 2, the deer were out-hustled for the ear corn. Raccoons and mice found and used the corn while it was still buried. The basic reasons for the limited use of ear corn by deer when it was buried and scattered are not known. It's possible they rely more upon vision than smell in obtaining food during the winter. Regardless of the reason, the end result was limited use of the ear



**TABLE 2**  
**Wildlife Utilization of Ear Corn Distributed in Study Area 2**

<i>Date of Inspection</i>	<i>Number of Ears Eaten by Species</i>					<i>No. of Uneaten Ears</i>
	<i>Deer</i>	<i>Mice</i>	<i>Raccoon</i>	<i>Others</i>	<i>Unknown</i>	
2/7/71	0	0	0	0	0	243
2/8/71	0	0	0	1	0	242
2/12/71	0	0	0	0	0	242
2/17/71	0	0	0	0	0	242
2/22/71	0	1	0	0	0	241
2/27/71	4	5	0	3	5	224
3/2/71	0	0	0	0	0	224
3/6/71	0	0	0	0	0	224
3/11/71	0	0	1	0	0	223
3/22/71	0	0	12	0	1	210
3/26/71	0	1	27	0	11	171
4/4/71	1	33	59	0	18	60
4/8/71	0	20	8	0	17	15
4/16/71	0	2	0	0	10	3
Totals	5	62	107	4	62	3
Percent of Total Ears Distributed	2	26	44	1	26	1

corn by deer or use at the end of the winter when maximum benefit was not obtained.

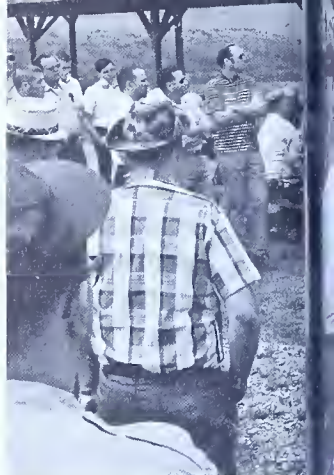
A second important point was confirmed by observations in this study. Deer were reluctant to leave suitable shelter during severe winter conditions. At no time during the severe part of the winter were deer tracks observed in the limited shelter portion of Study Area 1. Deer moved freely throughout the winter in other parts of Study Areas 1 and 2 where suitable shelter conditions existed. Even when a large part of the corn became exposed in the open portion of Study Area 1, during a late February warm spell, deer remained in good shelter rather than move 50 yards into an adjacent unsheltered area where an excellent food source was available and apparent. The importance of this

finding is that if ear corn is provided for deer under severe winter conditions, it had better be provided where there is shelter and it is occupied by deer.

Aerial drops of ear corn for deer in the winter cannot avoid varying degrees of scattering and burying when compared with other supplemental feeding techniques. If aerial feeding is conducted on a large scale, as when tons of corn are dropped in deer wintering areas, varying quantities of the corn are likely to land in areas not frequented by deer. Other corn, intended for deer in specific locations, may not be utilized if the corn isn't dropped exactly where intended. For these reasons, aerial distribution of ear corn is considered a poor technique for supplemental winter feeding of deer.

### **They Get Hungry**

Although confirmed meat-eaters, coyotes sometimes lapse into fruit diets and eat persimmons, chokecherries, juniper berries, or any other fruit available.



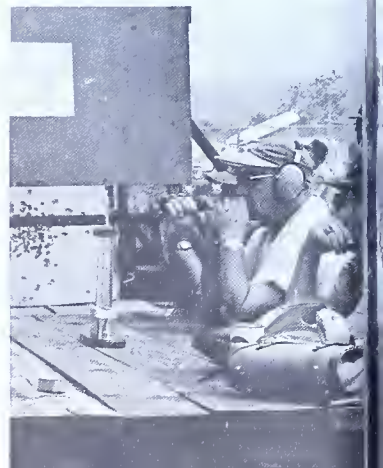
**EXECUTIVE DIRECTOR**  
deputies to match

## Deputy

**E**ACH AUGUST the G...  
pete in a handgun  
match, 18 teams took  
Harry Nolf's Montgo...  
Schrawder, Northumb...  
Reaching and maintai...  
part of the overall train...  
undergo.



**SIGHTS ARE** blackened for good definition on targets. Most officers use 357 Magnum revolvers.







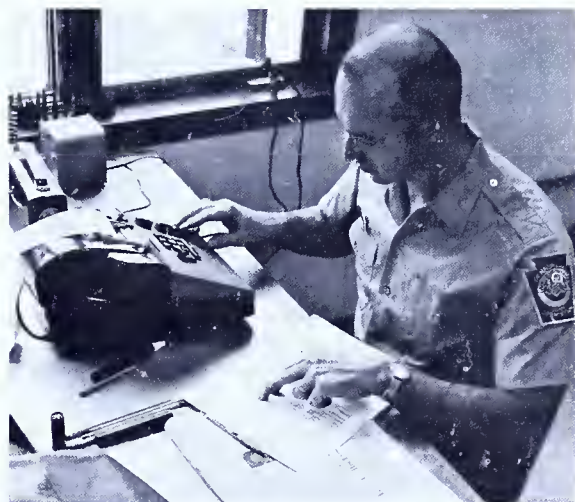
Bowers welcomes



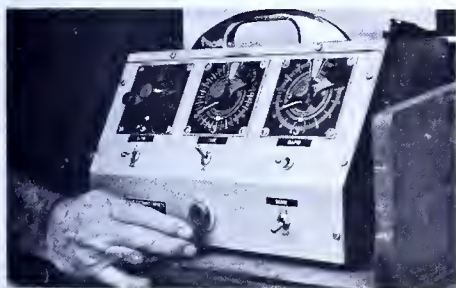
## Match

Commission's deputies com-  
peted at the Range. In the last  
year, he was posted by DGP  
team. Deputy Harold  
was high individual.  
Competition with handguns is  
one of the Commission officers

Photos by Joe Osman



PGC PERSONNEL score targets, and permanent records are kept at Harrisburg. Many deputies brought families to observe the competition.





# FIELD NOTES



## What's in a Name?

**DAUPHIN COUNTY**—While filing a complaint before a district justice for the killing of a doe deer in closed season, I was admiring the speed and efficiency of the secretary typing the complaint and thinking of the help this ability would be to me in filling out the multitude of reports necessary each month. However, when the young lady passed the complaint to me for examination and signature, I found that she had charged the defendant with shooting a doe “dear.” I asked her to change it, or the defendant might be mistakenly charged with murder instead of a Game Law violation.—District Game Protector H. H. Thrush, Harrisburg.



## Old Clam Mouth

Every good trapper has his own professional secrets. The one I was talking to last week was so professional that he would not tell his own wife where he was trapping!—Land Manager W. A. McGinness, Claysville.

## Perennial Problem

**WAYNE COUNTY**—The first two days of antlered deer season found the county covered with 20 to 30 inches of snow, which made very hard going for the hunter. However, this did not hamper some dogs in chasing deer. Deputy Vaverchak had several New Jersey hunters at his house during the season and one was successful in killing his buck the first day. The second day, while he was driving for the other members of his party, he happened upon three dogs which had a button buck down in the snow and were attempting to rip out the throat. He did not have a firearm with him, so he grabbed a stick and attempted to drive the dogs off. The largest dog then attacked him, resulting in a torn coat and glove. He finally did scare off the dogs and half pushed and carried the bleeding deer to Vaverchak's house, through all the deep snow. Unfortunately, the deer died in two days and the dogs escaped.—District Game Protector F. W. Weigelt, Galilee.

## And in Column Six

**DAUPHIN COUNTY**—While checking a hunting party's roster during deer season, the captain of the party explained to me that under the column marked “Sex” his wife listed “Male” or “Female” for each hunter in their party. This column is intended for the sex of the deer which are harvested, but with the hair styles of today's generation, maybe this isn't such a bad idea.—District Game Protector G. W. Paekard, Millersburg.



## Helpful Hand

**SOMERSET COUNTY**—During the past bear season, William Swab, Somerset County Waterways Patrolman, and several other sportsmen were enjoying a day afield in the Kettle Creek area of Clinton County. They had returned to their vehicle for lunch. While they were eating, a small bear was seen crossing a pipe line and heading toward the road. Hearing shots in that direction, they took time from their lunch and day afield to investigate. Upon doing so, they found a cub bear of approximately 60 pounds had been killed and they apprehended the violators. This information was given a Deputy Game Protector and a State Police officer patrolling the area. With this type of cooperation, conservation is sure to win.—District Game Protector J. Burns, Central City.

## Makes You Wonder

**CLEARFIELD COUNTY** — Going over my records for 1971, I found that four hunting accidents occurred in this district during the 1971 deer season. Three of these were self-inflicted. Of these three, two occurred while the victim was removing a loaded rifle from his car. I wonder when hunters will stop this illegal and unsafe practice.—District Game Protector C. L. Keller, Clearfield.

## Wanderers

**CAMERON COUNTY**—For the first time in the 25 years I have worked in Cameron County, we have sighted a covey of quail. Where these 12 birds came from beats me, but we are all hoping they make it through the winter. They have been seen since early last summer.—District Game Protector N. L. Erickson, Emporium.



## Polite Photog

**LEBANON COUNTY**—One Sunday morning, Deputy Ditzler answered a knock on the door and the person asked if he could take a picture of the albino deer in the deputy's yard. Somewhat amazed, as he had not heard of an albino in the area, Ditzler thought for a minute, then knew what the individual had seen—a white nanny goat. The mistake is not uncommon, especially for a person seeing a brown goat in deer country. Interesting, however, was the fact that the person inquiring had enough consideration to ask permission to take the picture.—District Game Protector P. A. Hilbert, Cleona.

## Well, Wasn't It?

**CLEARFIELD COUNTY** — Amid the busy hours Game Protectors put in during the hunting season, we must sometimes find a spare moment to carry out a necessary household chore for the wife. An occasion arose on Monday, December 27, when I stopped at a local supermarket to pick up a few things during a lull in the day's activities. The packer-boy, not certain I should be there, asked, "Hey, ain't this the first day of the little game season?" — District Game Protector J. R. Furlong, Ramey.



### It Never Rains But—

**LYCOMING COUNTY** — A local sportsman's scope fogged up the first day of deer season. The following day he replaced it with another and went to the Consolidated Sportsmen's Grounds to sight this scope in. He had just fired several shots and was half-way to the target when a large buck came prancing out of the woods and stood there. You guessed it—his rifle was back on the shooting bench.—District Game Protector R. G. Clouser, Williamsport.

### Slight Interruption

On the first Saturday of buck season I checked a hunter from Pittsburgh who had been standing beside a tree, watching a hollow below. He heard a noise and turned to see what had made it. Just as he turned a big doe came running past, so close that she hit her head on the hunter's gun barrel and almost knocked the gun out of his hands. The deer fell, then jumped back to its feet and just stood there, looking at the hunter as if it were stunned. The hunter hollered "Shoo!" and the deer ran down the hill faster than ever.—Land Manager L. L. Harshbarger, Knox.

### Good Advice

**WESTMORELAND COUNTY**—"Seek and you shall find," "Ask and you shall receive." So the Good Book says and now is a good time for those short sentences to be put into use by sportsmen who want a place to hunt in 1972. Farmers and landowners are not as busy now as they will be in the fall. Get busy.—District Game Protector S. E. Lockerman, Pittsburgh.

### Lucky Guys

**CLARION COUNTY** — Recently, while fishing on the Allegheny River, three local sportsmen observed a bald eagle swoop down, take a fish from the water and fly back up river. The men are pleased, and rightly so, for seeing such a rare bird feeding in its natural state.—District Game Protector J. G. Bowers, Knox.



### Takes All Kinds

**VENANGO COUNTY**—Seen while on patrol—a hunter lying on the railroad tracks with his head resting on one rail, watching a gas line on the hillside for "doe" deer. The hunters who yell that hunting, "Ain't like the good old days" are sure right, in more ways than one. — District Game Protector L. E. Yocum, Oil City.



## A Family Affair

**SCHUYLKILL COUNTY** — During November and December my deputies and I were lucky enough to apprehend three carloads of jacklighters. Two of the vehicles were caught in the act of shooting and the gun barrel was out the window of the third. There were four persons in each vehicle. In the first was the driver, his wife and two friends. The second contained the driver, his girl friend, his mother and a friend. Inside the third auto was the driver and his wife and the shooter with his wife. This would lead one to believe that when jacklighting deer in Schuylkill County, the family that *slays* together *pays* together.—District Game Protector S. L. Opet, Hometown.

## Oldest Bear?

**SNYDER COUNTY**—In the January issue of GAME NEWS, I had a Field Note relative to a bear which was found sick in a field in Mifflin County. The bear was removed to Penn State, where it showed improvement, but then it went the other way and finally had to be destroyed. That bear, a female which weighed 164 pounds, is possibly the oldest known bear in Pennsylvania. Age has not been determined exactly, but experts say it was at least 30 years old.—District Game Protector J. P. Shook, McClure.

## Tough Luck

**FAYETTE COUNTY** — Recently a sportsman asked me what I do with all my spare time now that hunting season was over. I replied, "Well, yesterday I only worked 12 hours and was going to go fishing, but it rained."—District Game Protector R. L. Clawson, Uniontown.

## Chubby

**CRAWFORD COUNTY** — Donald Vaughn, of Conneaut Lake, shot a bear that dressed 405 pounds. He took the bear to taxidermist Bill Vorisek in Linesville to be mounted. Bill gave me some information that I think would be interesting to other hunters. The bear had  $3\frac{3}{4}$  inches of fat under the hide on the small of the back. This fat, when scraped from the hide, filled four 5-gallon pails with lard. This was in addition to the fat that was left on the carcass, estimated at one inch.—District Game Protector L. V. Haines, Linesville.



## Shoulda Stayed in Bed

**CUMBERLAND COUNTY** — The first hunter I approached during the recent deer season, I addressed as "Sir" but he turned out to be a 72-year-young female hunter attired in red hunting clothing with her silvery locks tucked up under a cap. Apologizing for my mistake, I proceeded down the road where I observed a long golden-haired individual combing her curly locks and addressed her as "Ma'am." This turned out to be a 19-year-old male sitting in a vehicle waiting for his companion to return. Some days you can't win.—District Game Protector E. F. Utech, Carlisle.

### Nuff Said

**HUNTINGDON COUNTY**—While setting traps for raccoons, Deputy Tom Wilson of McAlveys Fort thought he had enough bait (sardines) to make about a dozen sets. After three sets he discovered he was out of bait. As he turned to ask his son what had happened to all the sardines, young Tommy said, "Boy, Dad, these sure are good."—District Game Protector E. N. Gallow, Alexandria.



### Nature's Way

**SUSQUEHANNA COUNTY** — Lou Galloway, of Brushville, watched with fascination a battle between a skunk and red-tailed hawk in an open meadow. The hawk finally won, but only with a mighty flapping of wings was it barely able to remain airborne as it carried the still kicking skunk away.—District Game Protector D. G. Day, Hallstead.

### One Pleased Guy

**ERIE COUNTY**—The past hunting season ended on a pleasant note: I received a Christmas card from an enthusiastic sportsman with a note attached saying, "Thank God and the Game Commission for one of the best hunting seasons ever."—District Game Protector E. D. Simpson, Waterford.

### She'll Get 'Em!

**BEAVER COUNTY**—Deputy Zinkham was patrolling in New Swickley Township on the first day of the antlered deer season when he saw a woman standing on a watch. She had a shotgun and was using an umbrella because of the heavy rain. He noticed she had no license displayed and asked to see her license. She said she didn't know she needed to have a hunting license to shoot these \*&e% rats. Deputy Zinkham asked what rats, and she stated that she had shot several rats that were clogging her sewer drain.—District Game Protector G. T. Szilvasi, Midland.

### Lot of Work

On December 1, DGP George Miller, a hunter from near Pittsburgh, and six nonresident hunters from Ohio, all volunteers, and I spent about five hours of their hunting time dragging out a bear that had been killed the day before. The bear was taken to the deer check station at Clarion and weighed in at 350 lbs. hog-dressed. A trophy wasted by a senseless person. I would like to thank all who helped drag it for two miles. I enjoyed their company and sense of humor.—Land Manager D. Gross, Marienville.

### Got the Formula

**CENTRE COUNTY**—After this deer season, when I hear comments about there being no deer, all I do is point to one camp in the Poe Valley area. This camp took 23 bucks during the antlered season. Also, they shot a bear this year, their 24th since 1950. All their hunting is done on State Forest Land or privately owned land that is open to public hunting. — District Game Protector G. F. Mock, Coburn.





# CONSERVATION NEWS



By Ted Godshall



**C. CLAIR WINTER**



**ELMER M. RINEHART**

## Two New Members of Game Commission

Two businessmen have been sworn in as members of the Pennsylvania Game Commission. They are C. Clair Winter, of Everett, Bedford County, and Elmer M. Rinehart, of Stroudsburg, Monroe County. Winter replaces Frederick M. Simpson, of Huntingdon, and Rinehart replaces Loring H. Cramer of East Stroudsburg, both of whom had served on the Game Commission since 1963.

Rinehart is president of E. M. Rinehart, Inc., a Stroudsburg automotive agency. He is a former dairyman. Winter is president and chairman of the board of the First National Bank of Everett, and has been a banker since 1927.

Both of the new Commissioners are members of numerous church and fra-

ternal groups and are active in many sportsmen's organizations.

In other action at the January meeting, E. J. Brooks, Lansdale, was renamed president of the Game Commission. Brooks, who was appointed to the Commission in 1969, served as president of the eight-member body in 1971.

James A. Thompson, of Pittsburgh, a member of the Commission since 1957 and a former president of the group, was elected vice-president, succeeding Andrew C. Long of Shamokin.

H. L. Buchanan of Franklin, a member of the Commission since 1953 and a former president and vice-president of the body, was re-elected secretary this year.

# Big Woods Deer Smaller in '71

Data collected at the Pennsylvania Game Commission's six deer check stations in December indicate that whitetail bucks taken in the big woods country in the last season were smaller than previously.

Standing out starkly in the data is the effect of the 1969-70 winter which, although not as severe as some winters, made some inroads on the deer herd where the range was severely overbrowsed.

During the past season numerous reports were received from hunters that antlers were quite small and difficult to see in areas where food is in short supply, and buck examinations bear out the validity of their complaints.

Although a number of nice bucks turned up at the check stations, an early analysis of preliminary information shows more small deer coming from the primary range than previously, and the percentage of spike bucks was quite high in many of the state's better-known deer counties.

Figures from the northwestern checking station, for example, indicate the trend toward smaller deer and antlers. Only 42 percent of the year-and-a-half-old bucks this past sea-

son weighed more than 100 pounds. In 1970, about 58 percent of this age class exceeded 100 pounds; in 1968, some 68 percent went over 100 pounds; in 1966, about 75 percent weighed over 100 pounds.

At the same check station, 57 percent of the yearling bucks checked in 1971 were spikes; in 1970, it was 51 percent; in 1968, only 41 percent; and in 1966, just 35 percent. Well over half of the bucks checked this year from counties such as Potter, Jefferson, Elk, Forest, McKean and Warren were spikes.

Poorer quality deer result from insufficient food supplies.

About 80 percent of the roughly 3600 bucks checked this year were in the 1½-year-old class, while about 15 percent were 2½ years old. Normally, this should be about 70 percent 1½-year-olds and 20 to 25 percent 2½-year-olds.

The smaller percentage of 2½-year-old bucks in 1971 is a reflection on the 1969-70 winter, when these animals were fawn (button) bucks. A number of them failed to survive that winter in the big woods country and consequently weren't available for hunters in the fall.

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## Record Number of Ospreys Seen

Ospreys, fish-eating hawks endangered throughout the continent as a result of environmental degradation, were counted in record numbers during the fall of 1971 at the Hawk Mountain Sanctuary in southeastern Pennsylvania. According to Alexander C. Nagy, sanctuary curator, 613 ospreys, an all-time record were sighted last fall.

Altogether, 22,177 hawks were spotted at Hawk Mountain, along with thousands of Canada geese, one black vulture and one raven. Numbers and species of birds counted include: 61 goshawks, 123 Cooper's hawks, 4239 sharp-shinned hawks, 3673 red-tailed hawks, 400 red-shouldered hawks, 11,573 broad-winged hawks, 23 rough-legged hawks, 35 golden eagles, 32 bald eagles, 462 marsh hawks, 22 peregrine falcons, 22 pigeon hawks, 564 sparrow hawks, and 335 unidentified hawks.



## Pennsylvania Elk Study Intensified

Efforts are being stepped up to learn more about Pennsylvania's elk herd. The Game Commission will provide funds to Pennsylvania State University to expand recently undertaken research on the elk herd. Additional funds have been authorized for helicopter rental for aerial censuses to support current and future findings and for other Game Commission elk activities.

In addition, intensified land management practices will be developed in an effort to contain and perhaps relocate the center of elk activity.

For many years the elk herd barely held its own, usually numbering about 30 to 40 animals. But in recent years the size of the herd has doubled, and changing human behavior and land use patterns have helped bring about changes and locations of elk activity.

During the past several years concern has resulted from damage inflicted on agricultural crops in the vicinities of the elk herd's residence

in portions of Elk and Cameron counties.

It is hoped that when additional facts are gathered it may be possible through land management practices to return the elk to their original activity areas and to control the population size and to eliminate some of the problems currently being caused by these animals.

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### Editorial . . .

*(Continued from Page 1)*

So the question comes down to this: Are you willing to pay \$8.20 for a license which gives you an entire year's hunting rights, or would you rather keep the price at \$5.20 and see everything deteriorate? No other choice is possible. If you agree with me that \$8.20—about the price of a tank of gas these days—is reasonable, let us know. Or better yet, let your legislators know. We need your help.—*Bob Bell*

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### Book Review . . .

#### Bolt Action Rifles

Frank de Haas, a fine gunsmith and a contributing editor for "The American Rifleman," has followed his earlier book, *Single Shot Rifles*, with another excellent reference work, *Bolt Action Rifles*. In extensive detail, he covers every major centerfire turnbolt rifle action, from the Model 1871 Mauser—the first successful design of the German arms genius Peter Paul Mauser—through the various designs which altered history on the battlefields of the world. They're all here—British Lee-Enfields, Italian Carcanos, Russian Mosin-Nagants, Greek Mannlicher-Schoenauers, all the important Mausers, the Krag, Springfields and Enfields. He covers just as fully the commercial bolt guns—the Winchesters, Remingtons, Savages, Weatherbys, Husquvarna, Sako, BSA, on up to the Texas Magnum, Champlin and Ruger, and others. Considerable history of each is given, along with specifications, takedown and assembly procedures, illustrated parts lists, conversion instructions, and candid comments based on firsthand observations. A tremendous research job that will be invaluable to anyone seriously interested in rifles. (*Bolt Action Rifles*, by Frank de Haas, edited by John T. Amber, Digest Books, Inc., 540 Frontage Road, Northfield, Ill. 60093, 1971. 320 pp., 8½ x 11, paperbound, profusely illustrated, \$6.95.)

# Maple Syrup Right in the Kitchen

By Barbara M. Anderson



**A**NY FAMILY with a few maple trees can have the excitement of a sugar camp in their own kitchen. It is as easy as boiling water! Here's how.

## Select Trees

Study the winter twigs of every maple you have. The accompanying sketch identifies the five most prevalent Pennsylvania maples. Each one gives usable sap water; however, sugar maple has the highest sugar content and silver maple the least.

The industry prefers sugar and black maples for their higher sugar levels. Winter twigs of these are too much alike for identification and you need to compare leaves. Black maples have more rounded leaf tips while sugar maple leaf tips are sharply pointed.

Trees with less than 10 inches width are not to be tapped. Larger trees can

have several taps. Some "maplers" make one tap for each two inches width beyond the initial 10 inches.

March is thought of as "maple month." Yet sap might begin its flow in February or extend into April. The "trigger" is a series of several nights of freeze followed by warmer days in the 40s. A hard freeze or a prolonged warm period interrupts the flow.

## Tapping

Collecting devices should be clean and ready for use before tap holes are drilled into tree trunks. Commercial camps might use sophisticated spiles and tubing made of nylon and plastic, forming a network of lines to holding tanks.

Kitchen-type maplers might do well enough with spiles cut from elderberry or forsythia stems. Hollow these and notch the top to secure a bucket handle. Try six-inch pieces.

Prepare a 10 percent solution of household bleach and water ( 1 to 10 parts bleach to water ) to sanitize the collecting devices and to flush out the tap hole when drilled.

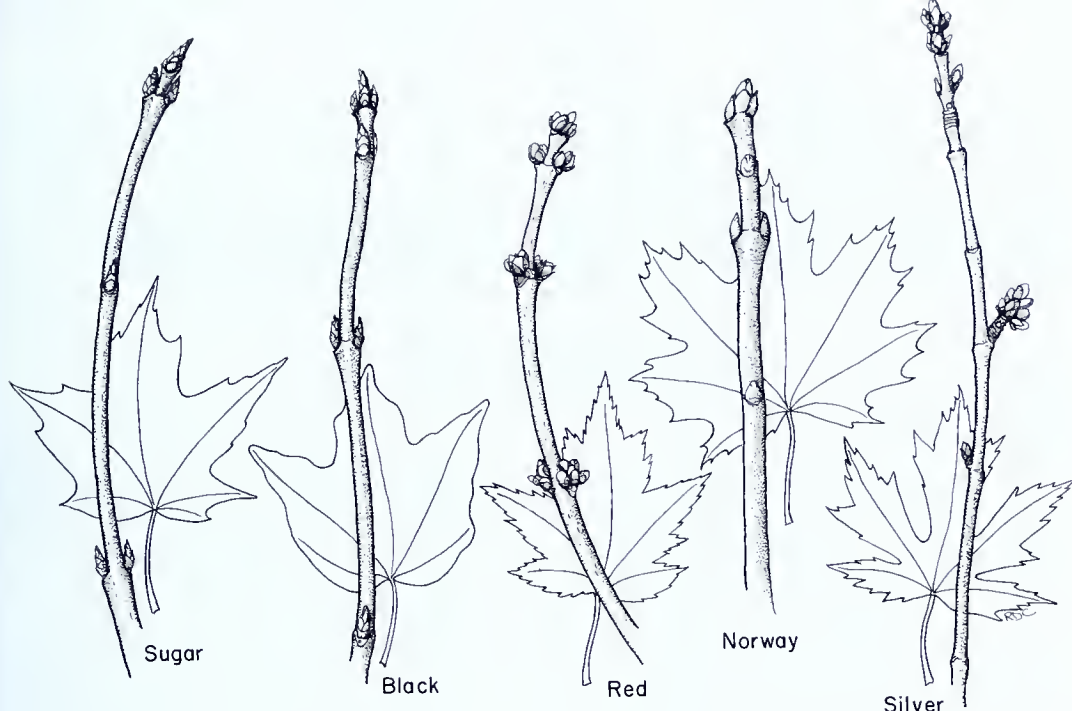
Foresters want to see tap holes drilled no larger than  $\frac{3}{4}$  inches wide. They recommend  $\frac{5}{8}$ -inch holes drilled  $2\frac{1}{2}$  inches deep. Larger holes endanger trees.

## Collecting Sap

With as much as five quarts of water each day per tap, buckets need close watch to avoid spillover waste. Sugar water is as vulnerable to bacteria as is raw milk. If it cannot be boiled promptly, store it at cold temperature.

Sap is a simple sugar solution. Syrup making is just a matter of reducing





*Illustration by Rae D. Chambers*

**ALL THESE MAPLES GIVE sap from which syrup can be made. Sugar content is greatest in specimen at left, gets less in succeeding ones.**

the water content by steaming it away. Interesting syrups have been made from spring sap water of birch as well as walnut trees.

### **Boiling Syrup**

Ed Farrand, Penn State Extension Forester, cautions that kitchen boiling produces excessive steam which has been known to loosen wallpaper and blister paint. An exhaust fan can be made with any window fan at the kitchen window.

Use large kettles. Allow headspace for rapid boiling. Sap might be added to one kettle during the day. As concentration nears the syrup stage, finish off that batch and store the sap or start a second kettle.

The syrup stage is seven degrees temperature above boiling water, or 219 degrees for most of us. A cooking thermometer is helpful. I canned (hot pack) our syrup into pint jars.

The second drawback to kitchen syrup pointed out by Mr. Farrand (who encourages the practice) is to expect an inferior product compared to commercial syrup which is cooked down at higher heat and speeds than

possible at home. Our "inferior" product was light golden in color and the sweetest stuff this side of Somerset!

Sap reduces about 40 times in volume during condensation into syrup. Our five taps yielded about five gallons of water on better days. By bedtime, that amount was finished off into a pint (plus) of maple syrup.

### **Quitting Time**

One April day, the house loses its maple-magic aroma. Steam and syrup are flat, tasteless. The tree is pushing its buds.

Patching or plugging the tap holes only runs the chance of introducing new infectious materials. It is best to pull your spiles and let the holes alone.

### **Worth It?**

Yes, if you are anything like the Andersons and get a kick out of visits from the Brownies . . . first graders . . . neighbors . . . passersby. Sixteen pints of syrup are worth mentioning, too. But the most worthwhile part of it was to help a bunch of kids grasp an idea of how food grows and can be harvested.

# a look at ... HUNTING & WILDLIFE

By Donald Zimmerman  
Wildlife Conservation Education Specialist

WHEN JOE HAYES opened the Upper Darby Senior High School newspaper early last fall, he was pleased at the headline, "Hunting Season Opens." Then he read, "Well, it's that wonderful time again for inexcusable mass murder. . . . I mean it's hunting season again, so all you killers, murderers and executioners better get your license from the Ministry of Death in Harrisburg. . . ."

Joe, then a high school junior, was appalled, for in July he's attended Junior Conservation Camp at Penn State's forestry camp. During this two-week program set up by the Pennsylvania Federation of Sportsmen's Clubs, he'd learned the fundamentals of wildlife management, forestry, soil and water conservation practices, hunter safety, survival techniques, shooting and fishing. Nothing he had learned here, nor anything from his earlier personal experiences, had led him to visualize hunters as murderers or executioners.

Joe felt obligated to reply to the article and to the editor he wrote: "The article 'Hunting Season Opens,' published October 30, is nothing more than a collection of unrealistic statements by a totally misinformed writer. In fact, hunters of recent years have led the fight for conservation. For example, there has been a restoration of the white-tailed deer and wild turkey in the eastern United States where they were practically extinct at the turn of the century.

"It is important to remember two things about the restoration of most of America's wildlife: first, the programs were financed almost totally by hunt-

ing license fees; second, the current protection of wildlife is financed largely by hunting license fees and excise taxes on sporting arms and ammunition. . . .

"If hunters do not harvest the annual surplus of game, nature steps in to do it; and it is seldom as humane as a hunter's bullet. Deer will overbrowse their range until starvation reduces their numbers. A severe winter can kill more deer than an army of hunters.

"Research shows that a good deer herd in a well-balanced habitat can withstand an annual harvest of about 40 percent without ill effects on future deer populations. Yet in most states, the annual harvest is rarely more than 15 percent."

Joe's reply was to only one of a growing number of attacks on hunting. An anti-hunting, protectionist element is trying to influence many people—from grade school on through the general public. Though perhaps well-intentioned, these people have failed to learn the lessons of the past—those that wildlife managers learned decades ago.

Consider *Education for Survival*, a social studies and science curriculum course outline written by some teachers in Madison, N. J. At first glance, we thought this was a step in the right direction. Then we read it carefully. Though factual for the most part, the anti-hunting element creeps in. Seemingly innocuous statements are important. For example: "More stringent laws must be made against hunting endangered species." No one argues with this. But then it states:



"Species needing protection include . . . beaver trapped for pelts. . . ." And in another section where endangered species were classed as "rare," "peripheral," or "status questionable," a list includes the fox squirrel, prairie dog, pronghorn antelope, prairie chicken and Canada goose.

We couldn't agree with these statements. Not one of these species is endangered. Digging through the professional wildlife literature we found *Rare and Endangered Fish and Wildlife of the United States*, published by the U. S. Department of the Interior. It lists animals in the categories specified in *Education for Survival*. For each species classified as endangered or rare, a brief review includes distinguishing characteristics, present and former distribution, status, estimated numbers, breeding rate in the wild and captivity, reasons for decline, protective measures in effect and proposed, number in captivity and selected references.

A review of this and other publications reveals that the Madison teachers erred in extracting information from the literature. Apparently they found a specific subspecies in a restricted geographic range cited in the literature and then generalized for the entire species over a much wider area.

For instance, the federal publication lists a fox squirrel subspecies, the Delmarva Peninsula Fox Squirrel, *Sciurus niger cinereus*, as endangered. It is found in several Maryland counties and the reasons for its decline were disruption of the habitat through timber cutting, construction, road building, forest fires, etc., and hunting for food and sport. No other fox squirrel species or subspecies is classed as endangered or rare. The fox squirrel, *Sciurus niger*, is a common game animal in many states and some even have such sound management programs that seven-month seasons are held.

Errors such as this one of generalizing from a specific subspecies to the

entire species, and other misinformation that cropped up in the Madison, N. J., publication, make it a questionable source-book for teachers who want to provide their students with an accurate and realistic picture of wildlife management, conservation and hunting. Sound biological management will prevent hunting or trapping from jeopardizing a wildlife species.

### What Can Be Done?

What then can be done about these attacks on hunting and wildlife management that are popping up in grade schools, high schools, printed messages, movies and television? Members of conservation agencies and other professional wildlifers and sportsmen are trying to provide the public and members of the teaching profession with factual information gained through years of experience and research.

One opportunity for members of the Pennsylvania Game Commission staff to present factual conservation information exists at the annual Teachers' Conservation Laboratory at Penn State. At our presentation, we discussed the materials available from the Game Commission, provided a selected bibliography of wildlife literature and then introduced a discussion on the anti-hunting element and errors of fact. We were asked by the teachers to provide some guidance on selection of materials for teaching conservation.

This column is intended to answer that request. We'll be digging into the wildlife management literature, reviewing it, developing a topic for each column and including a suggested reading list. From it, we're hoping teachers will incorporate the information into class presentations and discussions.

Let's review a few points.

The 1870s saw the exploitation of wildlife and settlement of our nation, with wildlife being a primary source of protein. It flowed freely into the



**DICK MATUSZEWSKI**, Washington Crossing, and his fine 8-point buck taken in Bradford County last season. Hunting by licensed sportsmen is the best method—in fact, the only practicable method—of controlling the deer herd on a statewide level.

cities from market hunters. Those were meat hunters, not sportsmen as we know them today. America was taking on a new role, cities were growing and the new nation was on its way to becoming a world leader.

The face of the land was changing. Forests were being cleared, sod broken, and wildlife was being altered or destroyed. And more things were changing. Industrialization was to alter the face of the land, the air, the water.

By 1900, hunters were becoming concerned about the vanishing wildlife. They were a new breed, con-

cerned with the perpetuation of wildlife and the preservation of land against man's senseless exploitation.

As it turned out, the sportsmen, hunters, fishermen and trappers sounded the alarm and largely through their efforts game and fish commissions were born and pressure was exerted for state and national legislation to save the threatened and vanishing wildlife. Licenses were required and the monies from them pumped into the youthful conservation agencies. By the mid 1930s, sportsmen influenced Congress to do even more. A bill authorizing an 11 percent excise tax on sporting arms and ammunition was passed, the money to be returned to the states on a prorated basis for wildlife management programs and research.

Sportsmen continue to support conservation agencies and encourage wildlife management along sound biological lines, and their numbers are growing at a steady pace. Recognition of the role sportsmen have taken in halting the senseless exploitation of American wildlife and in working to insure its availability for future generations has been slow in coming. But some have recognized the contribution sportsmen have made and will continue to make to the conservation movement. Such recognition is even coming from national legislators, including Senator Thomas McIntyre (N. H.) and Representative Bob Sikes (Fla.) who introduced a joint resolution asking the 92nd Congress and President Nixon to recognize sportsmen with a national day on the fourth Saturday of September.

### **A Lonely Crusade**

In his remarks in the *Congressional Record*, Representative Sikes pointed out: "For more than 50 years outdoorsmen carried on a lonely crusade to manage our natural resources wisely. They were the ones behind every major conservation action in Washington and state capitals. They



created their own publications to warn all Americans of what would happen to the environment. It is only in recent months that Americans were awakened to the threats of the destruction of their environment. The news media suddenly popularized ecology and the environment. The total American citizenry became aware of the serious need for conservation. That is not news to hunters and fishermen who gladly welcome the public with a crusade that outdoorsmen have conducted since 1900. All Americans are needed to join the campaign to use our Nation's resources wisely."

Many people helped lay the foundations of professional wildlife management and to develop the basic concepts. Perhaps the best known was President Theodore Roosevelt, an ardent outdoorsman who recognized wildlife as a renewable resource.

### First Major Book

The first major book on wildlife management was Aldo Leopold's *Game Management* published in 1933. Leopold defined game management as the art and science of making the land produce a sustained annual crop of wildlife for recreational use. He recognized the development of wildlife management: restrictions, predator control, refuges, stocking and habitat management.

Wildlife benefits many people. During most of the year, people enjoy being outdoors and seeing wildlife, perhaps photographing it while walking through the forest. In the fall, sportsmen have the opportunity to be afield and to take predetermined numbers of game animals during the hunting and trapping seasons. Carefully controlled seasons and bag limits prevent over-exploitation and insure that sufficient animals are left to repopulate the area.

In the early days of wildlife management, solutions were thought to be simple, but research and field experience have proved otherwise. Far

too many people today still retain the simplistic outlook on wildlife and animal populations. In their view, nature is usually pictured as a peaceful, "all is right with the world" situation, with Mother Nature visualized as a grandmother type, gentle, patient and loving. For them, wildlife takes on the Bambi image.

More realistically, Mother Nature, if you would characterize her, is a cantankerous, tobacco-chewing old woman who spits, cusses, kicks dogs and hates children.

The truth is, all life, from one-celled creatures to man, follows the birth-growth-reproduction-death sequence. Most small game animals live less than a year; only their great numbers enable enough of them to make it through the winter to perpetuate their species in the spring. Nature's harshness actually works for the good of each species.

Populations are critical and wildlife management, basically, is the manipulation of game populations and their environment. Determining the fundamentals of ecology that influence wildlife populations has taken years of research and field experience. The more questions that are answered, the more that are raised. In a later column, we'll review the basics of wildlife ecology and the principles on which wildlife management is based. We hope to illustrate the complexity of wildlife management and the role hunters have played in development of the science.

### Suggested Reading

Leopold, A., *Game Management*, Charles Scribner's Sons, New York City, 1933. 481 pp.

Madson, J. and E. Kozicky, "Game Gunners and Biology, the Scientific Approach to Wildlife Management," Conservation Dept., Winchester-Western Division, Olin, East Alton, Ill., 1971. 48 pp., 50c.

Committee on Rare and Endangered Fish and Wildlife Species, *Rare and Endangered Fish and Wildlife of the United States*, Bureau of Sports Fisheries and Wildlife, Resource Publication 34. Supt. of Documents, U. S. Gov't. Printing Office, Washington, D. C., December, 1968. xxiv + 166 pp., \$3.



**SOMETIMES A FELLER THINKS** it's not worthwhile to crawl out of the sack in the morning, but proper planning can change that attitude.

## ***Don't Be Bored!***

**By Les Roumtree**

**W**HEN ASKED why we go camping, many of us answer, "Because we want to get out of the rut," or "To get away from the old routine of getting up in the morning and going to work at the same old job," or some similar reply. For the most part this is true. While there is the group that goes camping because it is part of their job—such as surveyors, timber cruisers and conservation officers in remote places—most of us camp because it is a diversion from our everyday lives. But, surprisingly, I've heard a number of campers say that they won't be hitting the trail next year. Their reasons run like this: "Too many people at the campgrounds," "Nothing much to do," "The kids don't enjoy it anymore," "It's no vacation. . . . I'm more tired when I return home than I was when I left."

Actually, the real reason can be described in just one word—boredom. I can't say that I blame them. After all, if camping isn't fun anymore, why go? Let's take a look at Harvey and

Hazel Camper and their two children, ages eight and 12, and see what's happening.

Five years ago, Harvey and Hazel got caught up in the camping game and within a couple of years had amassed all of the goodies that campers eventually must have. They have a dandy pop-up camper that sleeps four comfortably, down-filled sleeping bags, a three-burner gas stove, deluxe folding chairs and table, a pair of two-mantle lanterns . . . the works! On July 4th for the past five years they have headed for Camp Whispering Pines and there they stay for 10 days of Harvey's two-week vacation (the last four days they visit Hazel's mother in Peoria). Now Whispering Pines is a nice campground. It has space for about 80 camper units, a little beach for swimming on a small pond that occasionally gives up a bluegill to the persevering fisherman, hot showers and the usual little grocery store that charges 10 to 25 percent more for everything. It's also a reasonably clean

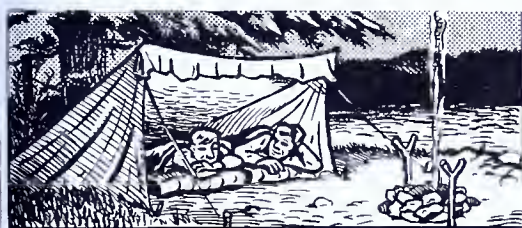


campground. Harvey pays two and a half bucks a night to stay there, the kids have a place to swim and he and the wife can sit around at night and worry about how much the lawn is growing back home. For five years Harvey and his wife convinced themselves they were having a great time . . . convinced the kids too. This year, as if by magic, everyone in the family reached a unanimous decision that they really didn't want to go back to Whispering Pines. They didn't want to go camping again anywhere. Their frontier days were over. They simply got bored with the whole thing!

Carl and Cathy live in the same suburban development that Harvey and Hazel do. They own just about the same assortment of gear and they too have a pair of children about the same ages. And, believe it or not, they were at Camp Whispering Pines last year. They had a ball! They must go back or they may hit some other spot, depending on how the mood strikes them. Their children spent some time in the water and they sat in their lawn chairs at odd intervals, but they did other things too. They and their children can hardly wait to get out camping again. What's the difference? Let's take a look at how some of the camping days were spent.

#### Monday—Harvey and Hazel

Camp is set up by 11:00 a.m. and Hazel is off to the friendly grocery store to buy some TV dinners for lunch. Speaking of TV, Harvey has brought a portable set along (for the kids) so Hazel won't miss her favorite serials. A trip to the nearby town for several cases of canned soft drinks and a case of Old Bellringer Ale. The kids



**ELECTRONIC METAL** detectors are now available at reasonable prices, can make an interesting hobby. Model shown is made by White's Electronics, 1012 Pleasant Valley Road, Sweet Home, Ore. 97386.

are sent to the beach for a quick swim before lunch and out come the lawn chairs. While the TV dinners are being heated in the portable plug-in oven, Harvey sinks into one of the chairs and says, "Boy, it sure is nice to get away from the rat race." the kids come back from swimming and eat the now half-thawed TV dinners. Harvey settles into the chair for good and finds the ball game on the tube. Hazel locates an acquaintance from last year and a bridge game is set up. The children go wandering around camp doing nothing in particular (it's too cold to go swimming again). Frozen dinners again that night.

#### Monday—Carl and Cathie

Camp is set up by 11:00 a.m. and the kids are recruited to help with building a campfire. Carl supervises the fire building and Cathie digs out the equipment for a weiner roast. They like to have the first meal in camp be a simple one too, and the kids supervise the hot dog cooking. They have discovered, by asking the camp owners, that several easy hiking



**INEXPENSIVE** magnifying glass can reveal details of unexpected beauty to both youngsters and their parents during nature walks almost anywhere.

trails lead out of the campground and a hike is planned to loosen up the legs after the auto trip.

To make the hike more interesting, Carl has bought a couple of inexpensive magnifying glasses for the kids. Everyone goes on the hike and the outing is planned to take no more than an hour and a half. The adults are not in the best walking condition and the children tire quickly, so the trip is not a long one. Leaves, insects and rocks, even flowers, come under close examination with the magnifying glasses, and many questions are raised about the identity of certain small creatures. Carl has an ace in the hole when they return to camp. He has brought some basic insect and plant identification handbooks, and by comparing what they've seen with pictures in the books a new field of interest opens up.

A little afternoon fishing is in order while Cathie whips up a pot of chili to simmer and then visits the store to fill the holes in the larder . . . mainly fresh milk and bread. Three rather small bluegills are the result of the fishing trip but they are carefully cleaned and put in the ice chest for tomorrow's breakfast. They won't feed

everyone, of course, but they will be most welcome to the kids who caught them. The chili is eaten with relish mainly because of the addition of hot rolls baked in a dutch oven.

After the dishes are cleaned up and a few pictures are taken to record the first night in camp, another short walk is taken around the campground to get acquainted with the other inhabitants. Carl finds out from another camper that the bluegills are bigger at the other end of the pond and the kids find some fellow junior scientists who would like to go insect inspecting with them tomorrow morning. Before they go to bed that night a light dusting of flour is scattered on a four-foot square plot of ground in front of the camper. This is done to see what animal tracks they might be able to spot when they climb out of bed the next morning. Another fun thing to do.

#### **Tuesday—Harvey and Hazel**

While Harvey drives into town again for a morning paper, Hazel makes a pot of instant coffee. The kids drink a glass of powdered juice and eat a bowl of cereal. They are sent off swimming again or told to go for a walk around the campground. Harvey comes back with the paper and sinks into his chair again to read the sports section and swat mosquitoes. Bologna sandwiches for lunch and the children swim . . . again.

Hazel doesn't like the people she played bridge with yesterday so she buys a stack of magazines at the friendly camp store and settles in for an afternoon of reading. Harvey didn't sleep too well last night (it might have been the TV dinners) and takes a short snooze. A different kind of frozen dinner tonight . . . chicken instead of turkey! The camper next door doesn't agree with Harvey on politics or baseball—the TV set goes black—the eight-year-old cuts his foot in the pond . . . what next? And we've got eight more days to go! (They can hardly wait to go home.)



## Tuesday—Carl and Cathie

Cathie notices on the campground bulletin board that there is an antique auction in nearby Smallville and plans are made to attend. Real buckwheat cakes are mixed up for breakfast and topped off with maple syrup bought locally at half the price they pay for it at home. And the children devoured their bluegills. From tracks in the flour, they learned that some animals did visit their campsite last night.

After the dishes are washed with all lending a hand, Carl holds a special session for the kids, instructing them on how to use the new camera. Pictures are always fun on a camping trip and even more so if the kids take some of their own, put them in their own photo album and think up their own captions for each picture. Cathie heads off for the antique auction and the kids have a short swim while Carl straightens up the campsite in preparation for another assault on the bluegills at the other end of the lake.

The family meets again for lunch. It consists of instant soup, the dried kind, and hamburgers grilled over an open fire. For a special treat Cathie has picked up a box of fresh, locally grown strawberries at the filling sta-

tion for dessert. A short nap for everyone and then the rest of the afternoon is planned . . . more hiking, bird watching, swimming, insect gathering, fishing, tree identification. The choices are endless. I'm sure you're beginning to get the point by now. . . .

Children and adults alike get into a rut quite easily on camping trip after camping trip. The big problem with Harvey and Hazel is that they are doing almost the same things they were doing at home, only enjoying them less. They were trying to take their daily routine along with them instead of leaving it at home. Carl and Cathie, on the other hand, made a strong effort to do new and different things on the yearly camping adventure and tried to add a bit of outdoor education for themselves and their children.

While campground owners love repeat business and are entitled to it if they do a good job, I think it is a mistake to return to the same camping area year after year. Because the same diversions are there, it is easy to fall into a set routine. New sites mean new scenery, new adventures, new friends and different ways of doing things. There are over 400 campgrounds in

**A SMALL LIGHTWEIGHT CANOE**, easily transported on cartop carrier, more than pays its way at a campsite near a lake or stream.



Pennsylvania and it is doubtful if one could visit all of them in a lifetime. While the familiar surroundings of a favorite campground always add a measure of comfort, it can become rather ordinary too. You left the convenience of your home base for something different . . . so why return to a place that has become nearly as familiar as home?

If you have room, take the bicycles along. Even if you and the kids don't ride them at home, you might find the two-wheeler an excellent way to explore the countryside near the campground. Take along some nature identification books and mark down the things you see. As the children's knowledge of nature increases you'll find that they begin to enjoy camping more instead of less. (How about it, Dad, how many trees can you identify from the bark or leaves . . . or how many bird species can you spot on a one-hour hike?) Take the kids on a tour of the campground and show them how other campers, unintentionally perhaps, are harming the area. Such things as using a live tree for an ax holder, digging trenches, stripping bushes of their leaves. In these days of growing environmental awareness, the campground is one of the finest classrooms available.

Another good idea is to provide each of your youngsters with a notebook to keep a daily diary of their activities. This and their photo album will provide a lasting reminder of their 1972 camping trip.

I have mixed feelings about Harvey and Hazel. If they don't enjoy being out there in *my* outdoors perhaps the best thing for them to do is hang up the camping gear and take up tennis or croquet. On the other hand, those of us who care more than a little about the landscape of this country and the future of the creatures who reside there may have lost some good potential allies. As with our daily lives, camping can become a rat race if we let it. Let's go camping not just because it takes us away from our daily routines (although that's an important reason) but also because we want to learn more about our state and nation and about the plant and animal life that needs our help. Camping is fun, otherwise millions of us wouldn't be doing it. It can also be educational for youngsters and adults and a genuine recreating experience. My bet is that an active, mind-expanding camping trip can be one of the most refreshing experiences that man has yet devised. Much better than an equal amount of time spent on a psychiatric couch. And cheaper too!

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## Penalty Increased for Taking Bobcat

Under legislation recently signed by the Governor, the fine for taking, killing, wounding, possessing, or transporting from one locality to another within the state, or for attempting to take, kill or wound a bobcat or wildcat, is now \$50. As recently as 1937 a bounty was paid on bobcats, but the population declined following removal of the bounty, and now the supply is very small. In 1970 the bobcat was designated a game animal by law, and the Game Commission immediately declared a closed season.

## Now You Know

The amount of sunlight triggers the hormone changes which start breeding seasons for birds.



# Time for Tradition


By Keith C. Schuyler  
Photos From the Author

**I**F ANYTHING was missing, it might have been a fanfare of trumpets to signal the start of a new season for The United Bowmen of Philadelphia amid the rolling hills south of Phoenixville. But a rumble of thunder from the west provided the only echo to the starting signal for this contest which is unique in the annals of archery. For here was a living remnant of a tradition preserved from Medieval Europe through England to the shores of the New World.

Even the invitation sustained the element of dignity which has marked each activity of the Bowmen since it was founded on September 3, 1828.



The United Bowmen of Philadelphia • Founded September 3rd 1828

  
*invite you and your lady  
to a shoot of*

*The Club of The United Bowmen of Philadelphia*

*Sunday, May 2, 1971*

*at*

*Weatherhold, Chester Springs, Pa.*

*A collation will be served at noon*

*Shooting at 1:30 p.m. followed by supper*

*R.S.V.P.*

*Weatherhold, Beaverhill Rd. Chester Springs, Pa.*

*☯ Mi 6-8491*



**"MARKS" UNDER CLUB motto, Plena Fidelibus, are placed in order of member's seniority. Some have history going back over 100 years.**

No one knows for sure how many tournaments have been held, but the first arrow zipped an opening May 2, 1971, into the 143rd year since the club's conception. And little has really changed.

Now, as then, full membership in the oldest archery organization in the United States is restricted to 25 members of voting age. The original four

chairs are filled by Robert Lippencott, of Villanova, president for 1971; Gallo-way Morris, Wayne, vice-president; Lester Lorah, Oley, treasurer; Donald Hoops, Ardmore, recorder.

Above the shooting line waved pen-nants bearing the "mark" of members in order of the highest scores ever recorded. The club flag stood near the American flag, and facing the field of archers, at 80 yards, were six regula-tion 48-inch faces.

### Differences

Although the spirit that permeated the festive atmosphere was likely no less than when the first tournament was held by The Club of The United Bowmen of Philadelphia on Septem-ber 6, 1828, there were some differ-ences. At that shoot, and for some time after, targets were set up in the En-glish mode of double targets so that three arrows were shot one direction and three in the opposite direction. Also, the target face was somewhat different since it measured but 40 inches in diameter. Further, the face was different in that the colors from the center out were gold, red, white, black, and blue. However, scoring was the same as the present American round utilizing the nine, seven, five, three, one, values.

Five men composed the member-ship in the first club. They included Samuel P. Griffiths, Jr., age 25, an apothecary; Dr. Robert E. Griffith, 29; Jacob G. Morris, 27, a cousin of Grif-fitts; Charles W. Peale, artist, 32, and his brother Titian R. Peale, explorer for the United States Government, who was 27 at the time the organiza-tion was formed.

Then as now, the primary purpose of the club, aside from promoting archery, was simply to enjoy the sport. No great emphasis was placed on score. In fact, the scores, made with relatively primitive tackle, were little more than evidence of the activity.

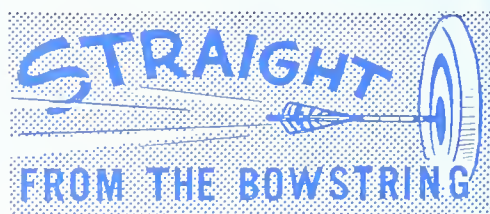
For example, at the first target prac-tice held three days after the original

meeting, records indicate that Titian Peale won with four hits totaling 10 points at a distance of 50 yards. Dr. Griffith ran a close second with two hits for four points, and Griffiths had one for three. It is not known how many arrows were shot.

The following week the range was increased to 80 yards. Griffiths won with three hits for 13 points. All of the original members participated in this shoot although it is not known how many arrows they shot. Nevertheless, from this practice session was devel-oped the United Bowmen Round of 84 arrows at 80 yards.

Other distances were tried from 100 to 125 yards, but the First Annual Prize Meeting, which was the name given to the club tournament, was held in October, 1829, with five par-ticipants. Dr. Griffith won with 14 hits for a total of 52 points and was estab-lished as the first champion archer of the United States. An interesting de-velopment of that tournament was in the fact that the scores of Samuel Griffiths and Dr. Franklin Peale were identical 54s. However, Griffiths had 18 hits to 16 for Peale. He was thereby awarded second place based on the number of hits, and a precedent was established which is continued today in all of archery.

A review of the history of the club indicates that there were days when the weather made it impossible to shoot. It is believed that the round of 84 arrows at 80 yards was finally es-tablished officially on or about June, 1835. Early attempts to make bows are reflected in some of the first scores. Troubles followed troubles until it was decided to obtain tackle from England. An order was placed with





one Thomas Waring, London, for whatever he thought would be best. Six months later the club received one bow, 12 "painted" arrows, a case, quiver, arm guard, shooting glove, "tasell," grease box, two spare strings, a treatise on archery, a pair of large target facings, a packing case, and cordage.

Tackle used on the first shoot of the

the Recess. Among the more sustaining viands were: turtle, soft-shelled crabs, ortolans, cold beef, ham, beef a la mode, strawberries with cream, bride-cake and ice cream." There was also mention of various beverages. It was a pleasant personal revelation to discover that the present club makes no great attempt to break tradition in either of these categories.



**PENNANTS CARRYING MARKS IN** order of highest scores ever shot at club fly over archers as precedent is broken to permit ladies to compete.

season last year was a bit more sophisticated. Also, although this was an innovation, ladies were permitted to take part in an official shoot for the first time. However, bad weather which sometimes plagued spring shoots in the early days, revisited the 1971 opener. This was of no great consequence since actual shooting is only part of the day reserved for festivities.

A note from Dr. Robert P. Elmer's *Target Archery*, published in 1946, gives a rundown on United Bowmen including the following, "Succulent suggestiveness of the bill of fare for the 4th of July in 1844, led me to search the archives for further revelation of the gustatory practices of our predecessors. They courted no risk of malnutrition, either there in the lodge or during this salutary hiatus between halves which is known officially as

For example, our light lunch at noon was followed by shooting, which was followed by proper utilization of an extra period provided by shortening of shooting because of the weather, followed by a pleasant supper, followed by memories of a day well spent.

It is certainly to the credit of the members that they completed a full half of the planned tournament in what at times was heavy rain. Although the weather did not dampen the spirits of participants, it certainly affected the scores as rain gear hampered shooting.

Naturally, there were some differences between the early tournaments and the opening shoot last May. Today's Bowmen utilize some of the latest in tackle, and bow sights are standard. Certainly the bows are an



**DONALD HOOPS, recorder, checks score sheet as Mrs. Patricia Baier, co-sponsor, looks on. United Bowmen of Philadelphia Club was founded in 1828.**

improvement over the Waring bow from London. But these modern adaptations are not noticeable in the pagantry which echoes the original tone of the early events.

At ceremonies following the shoot, it became evident why each member has a continuing personal challenge, regardless of whether the scores are impressive, for winners are those who show the greatest improvement based upon their "allowance." This is figured upon the average of the last five highest scores shot in competition. Consequently, it was Robert Smith who claimed the day for members. Patricia Baier was high for the guests.

Since each member has his own recorded mark, posting of the marks is the most solemn part of the day's ceremony. An attractive panel provides a permanent repository for these marks which are painted upon a small shield. Some of the marks originally established by former members have been claimed by new members. It is a new member's privilege to establish his own mark or to adopt one of a deceased member. Marks are placed on the panel in order of longevity in

the organization itself. Proctor Wetherill, who has been a continuous member since May 30, 1935, is the senior member in longevity. His lance, upon a purple and green shield, was first established by Gen. William H. C. Bohlen, a member from September 5, 1832, to his death on July 4, 1837. Many of the marks give a clue as to the holder's profession or special interest.

The club insignia is a quiver embraced by the letters "UB" in circular frame bearing the motto, *Plena Fidelibus*, which is interpreted to mean "filled by the faithful." Each of the marks also has a Latin inscription. Mr. and Mrs. Proctor Wetherill were host and hostess for the first shoot of 1971 at their beautiful country estate, Wetherhold. They shared sponsorship of the meet with Dr. and Mrs. Howard Baier and Mr. and Mrs. Albert Spendlove. President Robert Lippencott presided at the formal sessions.

#### **Oldest Club**

Although The United Bowmen of Philadelphia is by far the oldest organized archery club in the United States, there was a period when the club was completely inactive. During the Civil War from 1861 to 1865, but one meeting was held. This strained the ties that had held the group together. In 1888, a group of seven members had the records, trophies and other belongings placed in custody of the Historical Society of Pennsylvania. There they might have rested as merely a part of archery's history if it had not been for Dr. Robert P. Elmer. In 1932 he proposed to the Historical Society that a group of archers with whom he was associated be permitted to continue the club. The organization was revived and continues in its present form.

Dr. Elmer once claimed that the club always had a continuous activity in that an elderly member had lived through the period of the club's inactivity. Be that as it may, there is no



question that the club is active today, continuing the traditions established by its founders.

The present membership of Bowmen stands at 23, within the original maximum which has not varied over these many years. On July 11, 1945, the club was chartered as a non-profit corporation by the State of Pennsylvania. For a number of years the club has maintained close ties with the Royal Toxophilite Society of England. A mail tournament has been held between the two organizations since 1950, and there has been some exchange of personal visits among the members.

#### Miss and Out

A contemporary innovation coincident with reorganization was the addition of the Hecksher Wetherill, Miss and Out Round. The range is still 80 yards, and arrows that miss are taken out of play. The contest continues until only one archer has but one or more arrows remaining and is declared the winner.

The 125th anniversary of the founding of the United Bowmen was held in 1953. A highly interesting book was written which borrowed on the writings of Dr. Elmer who authored two books, *Archery*, and *Target Archery*. It carries a wealth of old and recent history of the club. A hard-cover volume of 62 pages, it also contains the constitution, induction rituals, many of the marks of Bowmen in color and those who have used them. A copy was presented to Queen Elizabeth II in her coronation year as a patron of the Realm's Toxophilite Society in token of the friendly bond between the two organizations.

A more intimate glimpse into the club's one time more guarded activities is found in the use of the marks. As a sort of semi-secret means of keeping records on a personal basis, minutes and tournament scores were recorded using the member's mark rather than his name. In keeping with

tradition, the invitation for the tournament to which Mrs. S. and I were invited contained the marks of the sponsors.

If a trace of pomposity can be detected in the preamble to the constitution of the organization, it reflects



**REFRESHMENTS HAVE** always been an important part of the annual archery event. These were served at Wetherhold, Chester Springs.

the manner of the times when the original was printed in 1844. "Archery has been exercised from the most remote ages of antiquity, and, in modern times, has always been considered a useful and polite accomplishment, affording in its practice a vigorous and beneficial exercise, conducive to health and recreation. With these impressions, we the subscribers, have associated ourselves together, under the name and title of The United Bowmen of Philadelphia, and for the better advantage of our views, mutually pledge ourselves to be governed by the following Constitution and Regulations."

It was unfortunate that Dr. Elmer, who had revived the club in 1932, did not live to share the 125th anniversary in 1953. He reveled in pomp and ceremony such as the event occasioned. Inclusion of a chapter from his *Target Archery* in the 125th anniversary book serves as an additional memorial to

his important personal place in all of archery's annals.

Membership in The United Bowmen is obtained somewhat differently than in the usual archery organization where a healthy desire and a nominal fee are basic (and frequently the only) requirements. Novices have a prescribed routine to fulfill before they may become accepted as full-fledged bowmen. Associate members are those who no longer maintain full member-

ship, honorary membership may be conferred on such as the club may choose, and life membership may be conferred, "on such ladies as the club deems entitled to that compliment."

Little has changed, and it is a personal hope here that little will change in The United Bowmen of Philadelphia. It exists as a sentimental link to the past, a significant historical establishment that will forever be a part of archery in America.

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## *Never Too Old to Learn*

**By Don Lewis**

*Photos by Helen Lewis*

**A**S FAR AS I was concerned on that early fall day back in 1962, the rifle I had just finished represented nothing more than a routine scope job. Other than the usual problem of getting the two rear holes drilled and tapped in the tough Savage 99 receiver, there was nothing special or significant that would set this particular job apart from dozens of other scopes I had mounted, yet I would remember this rifle for many years to come.

One of my family had taken in the rifle, scope and mounts, and I didn't meet the owner nor did he leave any special instructions. I did what all gunsmiths do in these cases—mount the scope in a manner suitable to the average size person. I zeroed the 300 Savage for a flat 100 yards and put the rifle in the rack.

When its owner stopped the next Saturday morning, I suggested that I

check out the scope to see if it was suitable for him. He was most cooperative, and repeatedly said that everything was fine and he was well satisfied. Perhaps it was his anxiety to take the rifle and leave that bothered me, and I probably would have given him his rifle if he hadn't asked several strange questions about the scope; I suddenly realized that he had no concept of how to use it. When I asked him to check the eye relief, he just stared at me, but the real stopper came when he asked me if all he had to do was find the target in the scope and pull the trigger.

I thought he was joking, but the sincerity of his expression made me realize that he actually thought he would hit the target by just looking through the scope.

I was at a loss for something to say as I looked at a well educated man in his early 60s who knew absolutely

nothing about shooting. It was a most sensitive situation, but I couldn't allow him to leave until I had shown him the fundamentals of using a scoped rifle.

He frankly admitted that he had no idea how to aim a rifle even though he was very fond of hunting and had taken one buck. He mentioned a number of times he had missed a good chance to get a deer but came home empty-handed because he couldn't shoot. By his own admission, he was the laughing stock of a big hunting camp he was part owner in. I asked him if other people had tried to help him, but he claimed they had too much fun teasing him about his poor shooting to really help. Some wise guy told him all he needed was a scope.

#### **Good Hunt . . . No Shoot**

He claimed he was a good hunter and could always see legal deer, but due to his lack of shooting ability, he either missed or didn't get a shot. The time he had gotten a buck, he did not know what he had done correctly. When he saw it was legal, he simply pointed the rifle and fired. He couldn't believe his eyes when the deer went down.

The more this man poured out his long-buried grievances, the more difficult it was for me to believe that any hunter would continue year after year accepting all the frustration, scorn and teasing. I also found it hard to believe that during all these years this man had not asked for help in overcoming his bad shooting.

I insisted that he spend some time that morning with me, for I felt we could correct some of the problems that had plagued him for years. He agreed, and I could sense that this was what he had wanted all the time but didn't know how to ask.

I spent nearly 30 minutes explaining the way a scope worked and how to use it. Once he began trying to aim, I could see that I had mounted the scope wrong for him. I loosened the

ring screws and slid the scope forward. When the reticle had been squared, the focus set for his eye, and the proper eye relief attained, we went out to my range to sight the rifle in again.

He had plenty of ammo with him, and I had the rifle back on zero in a few shots, but when I suggested he try his luck, he flatly refused. Nothing I said made any impression on him, and when my patience wore thin, I bluntly told him it was no wonder he was the butt of the camp jokes since he really didn't want to learn how to shoot. I ended my mild oration by telling him I could teach him how if he actually wanted to learn.

Immediately, I apologized and began to gather up my equipment. He stopped me, and, in a manner I'll long remember, asked me if I could teach him to just hit the target which happened to be about 18 inches square. His face lit up as a child's does at a birthday party when I assured him I could teach him to hit the 4-inch bullseye. He sat down at the benchrest immediately.

There's no point in going over all that he did wrong. In fact, for the first five shots, there was nothing that he did properly. It took him three shots before he managed to land one in the target board. I went to the Army dry fire method of having him aim the empty rifle and squeeze the trigger. This worked and it wasn't long until he kept most of the shots near the bullseye. Before a box of ammo went up in smoke, he hit the 4-inch bullseye.

I can't say that he left my range a fine shot, but he had learned the fundamentals. He improved to the extent that his last five shots stayed in







**CLYDE HART, FAMED BARRELMAKER,** discusses techniques of making accurate rifles with Don Lewis.

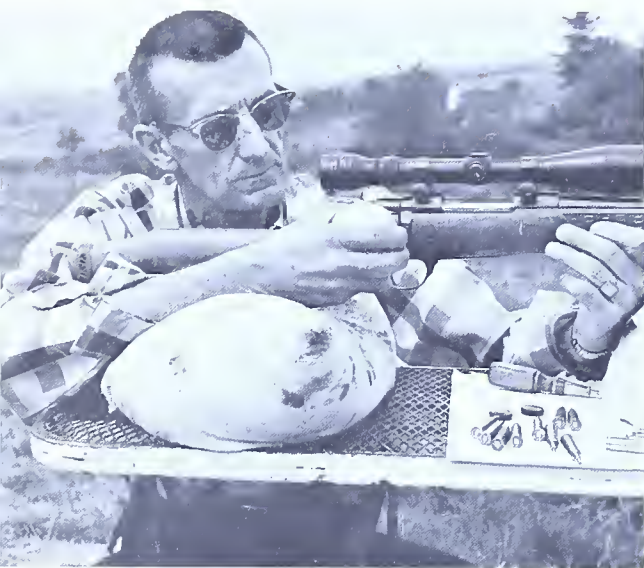
a 7-inch group. It was more than he ever hoped to achieve.

Unfortunately, I have no Cinderella ending for this episode. I can't say that my instructions helped him down a trophy. I never saw him again, but I do know that he was better qualified when he left than when he came.

The real truth about shooting is that many once-a-year hunters don't know how to shoot. I don't mean to sound critical; the pressures of earning a living prevent them from using their rifles as much as they should. During the many years that I have been shooting, I've reached the conclusion from personal observation that a large majority of hunters have no genuine knowledge of how to shoot with any degree of consistency.

I'll admit that the man in the beginning of this article is a rare exception; most hunters can do far better than he did. Yet, from what I've seen time and again at my own ranges, a good percentage of hunters could profit by understanding a few of the basic fundamentals of a rifle and how it shoots.

There are many reasons why we can't put our bullets where we want them, but I believe that recoil is the prime factor. I doubt if there is anyone, myself included, who doesn't have an inherent fear of recoil. We all get set for the beastly blow our favorite deer rifle is about to deliver, and this is ridiculous. Most of the fear of recoil is psychological, as few big game rifles used in Pennsylvania have much recoil, or at least not enough to cause any great concern. I'll admit when I fired well over 100 rounds from the powerful 378 Weatherby Magnum, I took some precautionary steps to reduce the heavy backward thrust of this large cartridge. Shooting 20 rounds at one sitting with a maximum load of 118 grains of 4831 powder behind a 270-grain bullet (a max load in the 30-06 is 60 grains of 4831 with the 150-grain bullet) made me realize that recoil is very noticeable in this heavy caliber. My shooting window is roughly eight inches square, and I could not keep the rifle from bouncing against the top of the window with the full load. I finally wrapped a large



**IRONING BOARD, sandbags and folding chair make portable outfit for shooter who wants to learn proper aiming and trigger squeeze—here likened to squeezing an orange.**

piece of foam rubber around the barrel to keep from scratching it against the window.

Even with the large 378 Weatherby, I can't honestly say the recoil is objectionable. For sure, it's there, and I did wear an extra pad under my shooting jacket, but from all that shooting I suffered no bruises or ill-effects.

There is no doubt in my mind that if all shooters could cope with the recoil problem, a definite improvement would show up on the target. Too many times, I've seen large, husky men brace against the recoil of a common 30-30 or 270 Winchester as if they were about to be shattered. Isn't this nonsense? These same people play touch football, work out in a gym, or get involved in friendly horseplay where bumps and blows are far more severe than the mild kick of a 270 or 30-06.

I'm stressing the recoil factor because it is the demon that keeps thousands of hunters from enjoying their big game rifles. I'm certainly not against the Magnum calibers, but I feel that most Magnum owners don't enjoy shooting even the 264 or 7mm

Magnum. Many times, I have fired one of the larger Magnums to get it sighted in and afterward the owner took a couple of shots offhand instead of sitting at the benchrest and firing until he knew exactly how to get a tight group. I think this is wrong. I would never own or use a rifle I was afraid to fire.

Yet many hunters today own rifles that are not suitable for them. Unless the rifle is a pleasure to shoot without fear of getting kicked black and blue, it is really not worth owning as a hunting outfit. I shoot many rifles over the course of a year, but I can think of no nicer way to spend a free evening than to sit at my benchrest and fire a few groups from my Ruger No. 1 7x57. Only a little more powerful than the old 32 Special, it's a joy to shoot, and with this fine single shot rifle, I have cut some remarkable groups of just over an inch at 100 yards. This is hard to do with a caliber that puts fear in the heart of the shooter.

Becoming a fair shot is not beyond the reach of any man or woman. The basics of shooting are simple: steady aim, concentration, and an even squeeze of the trigger. Notice I put concentration after aim. It's at this point where 90 percent of all shooters fail. They do put the reticle or sights on the target, but in getting set for the recoil, they don't concentrate on keeping the sights on the aiming point, and before they realize what they have done, the shot is fired. The results are usually wide groups. If this

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simple mistake can be corrected, the shooter has the battle half won.

I've taken people who never fired a rifle, and after explaining how to concentrate, they have fired inch groups at 50 yards with the light caliber chuck rifles. A few years ago, a young lady who had never before handled or even touched a firearm of any type put five shots from my 40XB-BR 222 Remington in a 1½-inch group at 100 yards. She did this remarkable shooting after firing only 10 practice shots. The 40XB-BR is rather heavy and has no noticeable recoil, and the lady learned the secret of concentration while squeezing the light trigger.

### Stay On Target

I'm not afraid to wager a game pocket full of acorns that eight out of 10 shooters see only the target in the sights once before they decide to pull the trigger. This is not the way to do it. The sights or reticle must be kept on the target while the trigger is being squeezed.

I catch myself now and then shotgun shooting with a rifle. Once at a turkey shoot, I put the sights on the target and pulled. I missed the inch bullseye by five inches. Had I concentrated on holding while squeezing, the results would have been much different.

Learning to shoot well is basically a matter of repetition. Doing the right thing over and over. On the rifle range in the service, I used to get sick and tired of dry firing. I didn't know it then, but this was actually teaching me how to shoot better than allowing me to simply blaze away at the target would have. The easiest way to become a good shot is by practicing on paper targets from a steady benchrest. A lot of fellows seem to think this is just a waste of ammo and time, but the man who is willing to shoot from the bench and evaluate his shooting will be a much better shot in the long run.

Hunting will not teach any person

how to shoot. Believe it or not, I had killed hundreds of woodchucks before I realized that I didn't know how to shoot. Hunters tend to equate killing with good shooting; this is a real misconception. When a hunter fires at a deer's rib cage and makes a clean kill with a neck shot, he may have a



**5-SHOT GROUPS** fired by Lewis at 100 yards, left, and 200 yards, right, using 220 Swift and selected handloads. Most guns don't shoot this well, but some good varmint models will equal these groups if the shooter does his part.

trophy rack, but he missed his aiming point by nearly two feet. That's not good shooting in anyone's book. This is one of the reasons I keep insisting that more big game hunters take advantage of squirrel and chuck hunting with the scoped rifle. Each of these is very demanding. It takes a steady hold with plenty of concentration to make a 50-yard head shot on a squirrel, and the same holds true at the longer distance in the realm of chuck hunting.

When I learned that I was killing chucks with misplaced shots, I got some good advice from a veteran shooter and built myself a benchrest. After much shooting on paper, I began to get a comprehensive view on how to shoot. Before, it was just aim, pull and hope; the kill was all that was important. When I learned how to shoot groups, I soon discovered that I was not the shot I considered myself

to be. Under actual hunting conditions, there is seldom enough time or a way of knowing if the bullet went high, low, or off to one side. On paper, the hole remains for the shooter to see. Group shooting from a benchrest shows the shooter just what is being done incorrectly.

I have no love for firepower shooting. I am not impressed by hearing a hunter gloat that he worked over a herd of does or fired a full clip at a bounding buck. I certainly believe in firing as long as there is a good chance of making a clean kill, but to depend on sheer luck by throwing four or five wild shots after a buck is not how it should be done in my book. To me, one well placed shot is worth a bucketful thrown into the wind.

No one is perfect, and few hunters ever attain the ability to make all perfect shots. However, I sincerely believe that all of us can upgrade our ability to shoot by getting a rifle we

are not afraid of, learning how to squeeze a trigger, and mastering the secret of concentration. There are no hidden secrets in learning how to shoot; it's just a matter of desire and finding the time to practice. Since I found out what group shooting did for me, I have always claimed that no shot in practice is wasted. I try to fire my Model 64 Savage/Anchutze 22 squirrel rifle 25 or 30 5-shot groups before the early season. It doesn't guarantee that I'll get every squirrel I shoot at, but I can think of a number this past season that I wouldn't have taken if my practice sessions had not improved my aim, concentration and trigger squeeze.

Don't depend any longer on just luck. Guarantee a better chance for success next season by following my advice. It could be the turning point in your hunting career and add a brand-new dimension to your shooting life. . . .

---

### *Seems Smart to Us*

Chipmunks disappear from the landscape during cold winter months and hot summer periods for the same reason—comfort. They go underground to keep warm in winter and cool in summer, emerging when the temperature is to their liking.

## Looking Backward . . .

“Deer hunting was pursued with great success on the lake [Sugar Lake], the hunter approaching the unsuspecting animal by means of a canoe. A bark lantern was made with two apertures for candles and fastened to a board. The board was attached to the prow of the canoe and the lighted candle cast a gleam over all objects in front, but the boat and its occupants were hid from view. The game could always be approached in this manner to within easy range, and the hunter was unfortunate or unskilled who failed to shoot half a dozen deer in one evening.”

“History of Crawford County,” p. 686, Warner, Beers & Co., Chicago, 1885.



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### COVER PAINTING BY RANDY ROWE

The hooded merganser, often called a "fish duck" by hunters, is a distant cousin of the diving ducks. Primarily a freshwater bird, it dives and swims well and has a narrow, cylindrical bill with serrated edges for grasping its prey. The hooded merganser breeds mainly in low wet woods across the middle of the continent. It often uses a hollow snag for nesting, sometimes sharing it with a wood duck. Six to 18 glossy white eggs are normal. The young hatch in a month and flutter down to form tight groups on the water which resemble swimming muskrats, a maneuver possibly meant to fool predators.

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## Needed: a New Gun Law

ON NOVEMBER 19, 1971, LIFE Magazine published a story called "Fortress on 78th Street." It chillingly described how a criminal-plagued population tries to barricade itself behind multiple-locked doors and barred windows so it might live through another night in hoodlum-infested New York City. In a questionnaire, LIFE asked its readers to give their opinions on crime, and a summary of 43,000 responses was carried in the January 14, 1972, issue. The answers are highly important for they came from readers all over the country and they show that fear of criminals is an overriding emotion in all environments—suburbs and small cities as well as the big cities where it has come to be expected. Consider these figures based on the LIFE survey: 78 percent sometimes feel unsafe in their own homes; 80 percent in big cities are afraid in the streets at night; 43 percent of families were crime victims last year.

This is the United States of America we're talking about, the most advanced country in the world in many ways, a country which can send men to the moon whenever it feels like it. Yet it can't assure you that you can walk to the mailbox on the corner after dark and come home alive. And this is the country in which a number of lawmakers and would-be lawmakers constantly scream for the registration and/or confiscation and abolition of guns "in order that we may be safe from crime." We need such laws to protect us, they proclaim. For instance, in Florida recently Sen. Lee Weissenborn introduced a bill calling for handgun registration with the comment that it was intended to curtail the "gun-carrying frontier philosophy." He said, "America . . . is no longer a land where gunfights . . . are accepted and necessary to defend our persons and property."

I wonder where persons like this have been burying their heads in recent years. Less than two weeks before the Florida senator's statement, for example, a young man and woman armed with a gun and knife forced their way into a Detroit, Mich., home and were beating a woman. Her two young sons ran to their parents' bedroom and grabbed a 38-caliber revolver and two shotguns which their father had taught them to handle. Shooting carefully to avoid hitting their mother, they killed one intruder and wounded the other. He fled but was quickly captured, "literally shaking with fright," according to the police. I guess it is something of a shock to a miserable hoodlum when he finds his intended victims also are armed. But what would have been the outcome here had these courageous youngsters not been taught to handle guns at an early age? Doubtless there would have been several dead persons—innocent ones.

And so I disagree with Sen. Weissenborn's claim that we no longer need guns to defend our persons and property. I submit that never before in the history of mankind has there been a greater need. Not even in the worst of our frontier days was it as dangerous to be on the streets as it is now. What Western "badman," as deadly as he might have been with his Colt 45 or his sawed-off shotgun, ever assaulted a woman or child on the street? Yet it happens every day now, in every city in the United States.

Apparently a lot of people disagree with the senator and others who think as he does, for following a debate on "The Advocates" (a nationwide educa-

*(Continued on Page 42)*





Jim Poever



*Man's Eyes Are Made for the Light of Day, and So He Misses  
Much That Occurs During the Hours of Darkness, That Other World of . . .*

# NIGHT

By Joseph B. C. White

SEVERAL YEARS ago, while camping in the Allegheny National Forest, I was awakened from a sound sleep by what I thought at first were pistol shots. The noise proved to be the violent whipping and popping of a loose section of my tent. As the gusts increased, snow swirled in through the opening and I could see the trees at the edge of the clearing swaying in the wind, rattling the remaining leaves that clung to their limbs.

I knew that my little tarp tent could not stand much longer, so I pulled the center poles down and rolled the canvas around my sleeping bag. When I did so, I saw the full sky—clear, bright and flooded with the light of a full moon and a multitude of stars. Clouds raced across the face of the moon, casting fleeting shadows on the campsite and providing an alternate clearing and darkening effect to the sky. The light layer of snow was already reflecting the moonlight, making the bright light even more intense, revealing amazing detail so that the wrought silver-gray bark of the big white oak at the edge of the clearing stood out with remarkable clarity.

It was hard to fall asleep again. Not because of the wind or the cold, for I was warm as toast in my down bag. But the beauty of that night scene was so impressive that I lay there drinking in its wonder for a long time before I dozed off to sleep soundly through the remainder of the night.

I suppose there are many who would find the wonder of a winter's night in the woods hard to appreciate; they might even find it difficult to understand why anyone would be

sleeping on the ground in December. But I have from that night an experience that I will treasure the rest of my life, a recollection that can be called up from my mind over and over for repeated savoring.

The point is that night is not hostile. It is mysterious and forbidding to some because they spend so little time with it. Our lives are ruled by light, either the full light of day or the artificial sun we create at night in our homes, towns and factories. We are attuned to the rhythm of daylight hours and our eyes seldom have the opportunity of adjusting to darkness.

## Special Fascination

There is a special fascination in night for those who know something of the activities that reach their peak among the creatures of the woods during the dark hours. The owl begins his flight and skids through the trees on almost silent wings, or hoots his eerie call from his favorite perch. A fox pads along the floor of the forest, stopping to check the scurry of a white-footed mouse through the fallen leaves. He raises his head and ears, the better to sift out the sound of small feet from the sliding of leaves before the breeze.

In winter even the night activity slows. The bear is asleep in his restless way. The geese and ducks have gone south. The noisy jay and crow are on the roost, silent for the most part unless disturbed. Yet the deer are browsing; the weasel is making his rounds, seeking to satisfy the hunger that gnaws his belly and drives him on his never-ending hunt. The muskrat and the beaver are snug in their lodges

and the steam from their breath rises in little columns and melts the snow around the airhole. The red fox yaps his familiar bark in the distance.

The night world is impossible for man to enter completely. He is at home in full daylight, absorbing the full spectrum of color. At night he is helpless compared to the night-eyed creatures which are at home in the gray, black and white world after sunset. Man hears their movements. He may even sense their presence and be able to follow the rustling path of mouse or deer through the dark woods, but even fully adjusted to the darkness, his eyes are strangers here.

### Hounds and Coons

More years ago than I like to remember, I used to run a couple of big red hounds through the hills of West Virginia. Our style of coon hunting was not refined. When the dogs hit a hot trail, we raced after them, unskilled in the art of sipping warming drinks before a fire and identifying the hounds by voice. We knew ours were the only ones out there, so identification wasn't part of the game. Through barbed-wire fences, across the creeks, into locust and briar thickets, we followed, stumbling almost blindly into trees, tripping over rocks, falling headlong over creek banks and down steep ravines—all for the thrill of seeing those rosettes of light at the end of the flashlight beam when we reached the spot where the coon was treed.

Thoughts of those nights years ago went through my mind recently when on a frosty night we spotted a portion of Pennsylvania's elk herd. In the attempt to get close for a flash photograph we stepped on a cow elk bedded down close by. Having that bulk of blackness move out from underfoot was a real surprise.

Night does have its compensations for man, however. He strains his ears and hears better for it. His lack of sight seems to sharpen his sense of

smell. His hands can detect the difference in the bark of trees.

One night in May I was in the back seat of a car full of would-be trout fishermen heading north. It was a beautiful warm night and I was resting well until awakened by the fragrance of wild crab apple trees in blossom. As I looked out the open window I could see only black and gray forms, but that fragrance remained as real as the blossoms themselves and I needed no eyes to tell me they were there.

Man has, from his dim past, feared the night. It is his practice to build up the fire and hang the lantern, as if to clutch some of the brightness of day and keep it longer. Outside the tent the small cooking fire is heaped with bigger logs and kept burning until the dying embers signal time for sleep and retirement from the work of day. The night world is strange to us. It is a mysterious world to most, depressing to many and attractive and fascinating only to those who seek to know it better by spending some waking time in it.

Night has special rewards for those who see its beauty. It is a personal experience, one that is not readily shared with other men, except those very close in tune with our own minds who are willing to share the quiet world by keeping quiet too. It is especially rewarding to feel the whetting of the sense of hearing and the eye gradually sharpening to some of the gray forms that wander in the shadows.

Perhaps some of these experiences begin in early years and live on as part of experiences that are savored and relived.

Once when I was very small, my father took me to a Christmas party at a little one-room schoolhouse on the ridge above our farm. The snow was deep when we left home and we walked across the fields and through the woods among huge snowflakes falling soundlessly from a black sky. During the long and pleasant evening



of singing and exchanging gifts the snow continued. As we walked home the snow stopped falling. The moon appeared and I remember watching the giant prints of my father's boots as I stretched my legs to match his stride. The whole world was clean and bright on that Christmas Eve, silent and beautiful, like the world we had been singing about at the party. Long before we reached home I was played out and I rode the rest of the way on Dad's back, leaning my head on the big woolen scarf he wore, watching

the special snow scene through sleepy, but wondering, eyes. It was a beautiful night and the one of all nights that I will never forget.

The day ends; dusk comes, and then darkness. The world then belongs to the moon and the stars and the creatures of the night. Man's eyes are made for the light of day, but if he will study the strange dark beauty of the night, hear its rich symphony of sounds, he will be rewarded with the experience of a glimpse into another world.

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**AUTHOR'S GRANDSON STANDS IN FIELD** of blue chicory, sometimes called "ragged sailors." All parts of the chicory plant are edible.

***For Nearly Four Centuries Pennsylvania Forests, Pastures, and Swamps, Meadows, Streams, and Ponds, Have Provided Edible and . . .***

## ***Wholesome Wayside Wildings***

**By J. Almus Russell**

*Photos by Roche, Don Shiner and the Author*

**B**READS, OILS, pot-herbs. Soups, salads, and sweets. Seasonings, coffee, and tea. All were food resources of the Pennsylvania wilderness. All were edible and wholesome. Yet many of the pioneers and their descendants were ignorant of wilding uses.

Fortunately, the new arrivals in Penn's Woods learned to support themselves by following Indian methods of identifying, domesticating, and cooking the native foods.

The American Indians, or Amerinds, varied their diet with wild fruits, roots,

herbs, and greens. Often they lived in villages where they cultivated corn, beans, squash, pumpkins, and melons. In times of famine, wild plants kept the tribal members from starvation.

Sources of breadstuffs were naturally the most important foods. A mainstay on a long journey was a bag of parched and pulverized *maize* (Indian corn). A spoonful of this meal, stirred in water and swallowed at a gulp, made an emergency meal. The mixture went by the name of "no-cake," a corruption of the Indian word *nookik*, meaning parched corn.



Among the more abundant bread-foods were the common acorns. While white oak acorns were preferred, nuts from any other oaks were also used.

The method of extracting the bitter tannin was first to collect the ripe acorns and spread them in the sun to dry. Then they were cracked and stored. Care was taken to put them in a dry place so they did not mould.

When needed for use, the nuts were placed in a mortar and pounded to a fine meal. Frequent siftings removed the coarser particles. The tannin itself was then dissolved by placing the 'flour' in a filter and letting water percolate through it until clear. The meal was then removed by hand. A little water poured over the meal gave it the consistency of dough. This might be cooked by boiling, a method similar to that used in making cornmeal mush. Thus a sweet, wholesome, and nutritious porridge was the result.

Another cooking method was to shape the dough into small balls, wrap them in green corn leaves, and then place in hot ashes with more leaves laid over them. Hot ashes were placed on top and the cakes baked until done.

### Wild Rice

Wild rice was universally found then as now. It grows in swamps and ponds, and along stream banks. Two persons usually do the harvesting in combined effort. One paddles a canoe. The second gently pulls the plants over the canoe, beating off the ripe grain with two sticks. After being gathered, the grain is spread out to dry for a few hours. Then it is parched in an iron kettle over a slow fire from half an hour to an hour.

After the rice is cooled, it is hulled by putting about a bushel in a pit lined with staves or burnt clay. The kernels are beaten with heavy sticks before the final winnowing process takes place.

This grain is served as a game accompaniment, eaten dry, or ground into a flour for bread or cereal.

Of the edible New England lilies, two had a particular food value—the yellow pond lily and the white water lily: Thoreau wrote of the yellow variety:

"We soon after saw a splendid yellow lily by the shore, which I plucked. I was six feet high, and had twelve flowers in two whorls, forming a pyramid, such as I have seen in Concord . . . on the East Branch . . . one which I thought approached the *Lilium Superbum*. The Indians asked what we called it, and said that the 'loots' (roots) were good for soup, that is to cook with meat to thicken it, taking the place of four . . . I dug some, and found a mass of bulbs, pretty deep in the earth, two inches in diameter, looking, and even tasting, somewhat like raw corn on the ear."

The Indians pulverized the seeds, also, making them into bread or gruel, or parching them for eating like popcorn. As muskrats stored large quantities of the bulbs for winter food, the aborigines frequently robbed their "houses."

The white water lily has roots looking and tasting somewhat like sweet potatoes. Breads and soups may be made from their sweet, mealy seeds, which resemble hazel nuts.

Another interesting bread variant is cattail pollen from which flapjacks are made. Late May or early June is the time for using the pollen when the cattails are ready to shed their golden powder.

The pollen is shaken into a bowl and substituted for half the flour required in any pancake batter. A healthful gruel for invalids may also be made from it.

In the early days, butter was scarce and often unobtainable. The settlers, following the Indian example, enriched their stews, soups, and other meat dishes with melted bear's fat. Oil was also pressed from sunflower seeds

for use like our modern olive oil. Hickory nut oil was produced by crushing the whole nuts, precipitating the broken shells in water, then skimming off the oily "milk."

Beechnut oil kept fresh for years. Oil extracted from oilnuts (butternuts or white walnuts) was early mixed with food as a frying-fat. In the process of preparing it, the ripe kernels were pounded and boiled and the oil was skimmed off. The remaining paste was used for bread dough.

### Welcome Change

After a heavy winter diet of corned beef, salt pork, brined fish, johnny-cake and molasses, pot-herbs were a welcome change. The tender shoots of early springtime plants furnished most wholesome food.

One of these pot-herbs was the great burdock. The stalks were cut before the flowers opened, and stripped of their rind. When boiled, these made a delicate vegetable green. The flavor is similar to that of asparagus.

The roots are scraped and peeled, then sliced into long strips. They may be cooked like oyster plant, and seasoned with salt and pepper. Or the boiled root may be mashed, made into cakes, and fried.

Wild hops are found as a climbing vine. They may grow in thickets, along river banks, or in other damp spots. When four to six inches high, the young, whitish sprouts may be culled. They are prepared and cooked like asparagus, or used as a pot-herb for soup.

In early summer, run-out fields and country waysides are blue with chicory. All parts of this plant are wholesome. The young leaves may be cooked like dandelions. The root, when dried, ground, and roasted, is used as a coffee adulterant or substitute. Chicory may be brewed exactly like coffee. As the grind is stronger than that of regular coffee, do not use the "extra spoon for the pot."

The much neglected and disliked

nettle should be picked with gloves and only when the leaves are young and tender. As a pleasantly nourishing and mildly laxative pot-herb, it may be used in soup, with salt meat, boiled like spinach, or as an additive to other greens.

For soup, wash and cut up the herb leaves. Pour boiling water over them, drain, and chop to a mush. Then add meat broth. Cool for a few minutes before serving.

The low-growing sorrel is prized for its very sour flavor. It makes an excellent soup when prepared like nettles.

The ubiquitous dandelion is cooked as a green with salt pork, seasoned with salt, pepper, and vinegar. Curled dock is equally good if the leaves are picked early in the season; likewise the fronds of young ferns, gathered before the stems are covered with down and the leaves uncurled.

Among the pot-herbs classed as salad plants are the water cresses, brooklimes, cattails, dandelions, and wild garlic. Leaves and stems of all of these herbs are eaten raw with salt, or as a relish dressed with sugar and vinegar, or mixed with other salad leaves. The flowering ends of the springtime cattail are in this class. The crinkle-root has a crisp, fleshy root-stock with a spicy flavor. It is eaten with salt like celery. The peeled, tender shoots of the great burdock may be substituted for radishes.

Our forefathers had very few food sweeteners. From Indians they learned to make maple sugar by boiling down the sap to the sugaring stage. They poured the wet sugar into bark containers or wooden pails. Sometimes they even granulated the sugar.

The settlers discovered wild honey in bee-trees. They early robbed the bees' forest hives and later domesticated them. Honey was more available than maple sugar and used for the same purpose.

Other sweeteners were the thick, stocky root of the marshmallow. Tradition states that excellent brown





**SASSAFRAS LEAVES**, above, show various designs. Below, broad- and narrow-leaved cattails.



**WILDHOP VINE** with ripe cones, above. Sprouts can be used like asparagus.



**RED AND WHITE** acorns on stump, above, provided flour for Indian breads. Below right, wild chives, which thrive along stream banks.

**DANDELION GONE TO SEED**, below. This potherb makes a delicious food, and many think fields of it a thing of beauty, but in a lawn it's hardly a joy forever.



sugar was found in gathering milkweed blooms while the dew was still upon them. The dew was pressed out and boiled down. The juice of ripe watermelons was also boiled down for a sweet syrup.

Perhaps the most luscious conserve which the Indians made was a mixture of fresh wild strawberries sweetened with maple sugar. This was held in large trays in the form of a rich jelly.

Popcorn balls were popular with the children. The popped corn was mixed with thick maple molasses after it had been popped over the fire in earthen jars. A record exists of a maid who was discharged because she used the family warming-pan for that purpose.

Trappers, explorers, and woodsmen ate frozen ants with gusto. They said they tasted like strawberries, probably because of the formic acid they contained.

Food seasonings were more varied than those in use today. Strange to say, the early settlers found that the best substitute for salt was maple sugar or maple syrup. Among some of the New England Indians, maple products not only took the place of salt in common use but also seasoned meat and fish.

Hunters, fishermen, and woodsmen were early familiar with the herb Robert. This plant with its deeply cut leaves and magenta-rose flowers enjoys the dampness of rocks in shaded glens. Its leaves, when "fined up" after burning, provide a satisfactory table salt substitute. The green leaves of the colt's-foot, treated by the same method, yielded a saline seasoning.

The pulverized seeds of the meadow-arum provided a black pepper substitute. The green leaves of the shepherd's purse ("pepper-and-salt"), chopped and sprinkled over cole slaw, served for the same seasoning. The pepper-root (crow's foot), grated, pounded, and mixed with a little vinegar, imparted a hot taste to meats, not

*Give*

## GAME NEWS

*To a Friend . . .*

unlike that of horseradish.

Beers, cider, and wines were all homemade and popular in early New England. Coffee, tea, and chocolate, when available, were all imported. They were found mostly in the homes of the rich and merchant class. Naturally, substitutes for these beverages were early made from native plants, roots, leaves, and herbs.

Typical of these drinks were potato coffee, chickory brew, parched grain, sassafras tea, pennyroyal tea and wintergreen tea. Maple beer, birch beer, and root beer also were made.

To make chickory brew, dig some of the long roots, scrub well, roast until hard and brittle, with the roots dark brown on the inside. Grind and brew them exactly like coffee.

Of woodland teas there is no end. One of the most popular—which is still popular after 400 years—is sassafras tea. Dig a few roots. Scrub them well. Cut into pieces short enough to fit the kettle. Cover with water or partly boiled-down maple sap. Boil for 30 minutes. As it boils, this tea becomes amber, then deep red. From this color the tea maker may determine the desired strength. Serve it clear for a diet drink, or with cream and sugar if dieting is not important.

Our Pennsylvania wild lands still produce most of the native plants and trees known to the Indians and pioneers. Yet today, few people can identify edible wildings. Many are a forgotten food resource. Take time to learn about the bounties that nature has available for you. Have satisfaction in gathering, preparing, and eating them. Then the enjoyment of wayside wildings will be yours.





## To Prove a Point

By Charles F. Schory, Jr.

**A**S WE ENTERED a large patch of honeysuckle at the end of the ridge, Steve yelled, "There he goes," and I saw a big woods bunny streaking toward Larry in an effort to reach his hole. Neither Steve nor Larry could shoot because they were in each other's line of fire. The rabbit ran almost under Larry's boots, and then, not knowing which way to go, turned and struck for another hole about 40 yards away. Larry's shot tore up the honeysuckle behind him. Then I saw Norm's double jump to his shoulder and as the report reached my ear the rabbit folded.

"I thought all the rabbits were shot out of here," I remarked as Norm placed the bunny in his game pouch.

"Aw, this one didn't know enough

to leave the area when the shootin' started," Norm said.

My son Steve and I were hunting with my brother-in-law Norm and his son Larry. It was the last day of the extended season for grouse, squirrels and rabbits. We were all trying to get some rabbits, but most of all I was trying to prove a point.

It had all started a half hour earlier when I called Norm to see if he and Larry would join us for a short hunt. It was then 1:30 in the afternoon and it would take another 15 minutes for us to get to his house. Norm didn't seem anxious to go and I couldn't understand why, as most of the time he would rather hunt than eat.

I said, "What's the matter, you getting old or something?" There was a

pause and then a groan at the other end of the line.

"There ain't no rabbits," came the answer. "They've all been shot off, least around here. Where you figger on goin' anyway, it's too late to drive any distance to find any good huntin'."

"I want to hunt the old Miller farm back of your place," I said.

"You crazy or somethin'? That place is trampled down like a herd of buffalo been through there. There ain't no rabbits there."

I replied that we were wasting valuable time arguing and asked him if he was going to hunt or not.

"Well, it'll be a wasted couple hours, but come on over, we'll take the guns for a walk." He hung up and in 10 minutes Steve and I were on his doorstep.

### Heavily Hunted

Now the old Miller farm is a heavily hunted area during the regular season. It is unposted land and only a 20-minute drive from the capital city. Most of the local hunters get permission to hunt. Other hunters driving by stop for a short hunt. Most of the fellows who hunt this farm contend that all the game is shot off by the end of the second week of the regular season. This was also Norm's contention.

But I knew that in years past when I ran my hounds on this farm in January and February, I could usually count on getting some good chases. I often had as many as five chases in a single hour. It's a fact that rabbits become nocturnal about the end of August. This means they start feeding more at night, and sit in their forms or holes during the day. If it's a cold blustery day, you might be better off hunting something else, because most of the rabbits will be sitting snug in some chuck hole. But if the day is the least bit warm or the sun is shining, you can bet old Br'er Rabbit is going to be sunning himself somewhere along the ridges or in a weed field, a bramble patch or some other cover

with a good escape route to a nearby hole.

That was the point I was trying to make. I wanted to prove that the game was there in the late season, but that the rabbits went underground and fed only at night when the hunting pressure was heavy. But when the pressure was eased off for a few weeks, the rabbits would be out feeding and sunning themselves in the winter sun.

It was 2:00 o'clock as we walked across an open field toward the ridge that stretched eastward for about a half mile. This ridge was a tangle of brambles, honeysuckle and blackberry thickets, interspersed with scrubby jack pine and a mixture of immature hardwoods. Dewberry brambles tugged at our boots at every step. The ridge was pockmarked with woodchuck holes, affording the rabbit population plenty of escape hatches. In the regular season, the rabbits always seemed to hole up immediately without giving the dogs a chase, but in the winter months with little hunting pressure, they seemed to get as much fun out of the chase as the dogs. They would often circle two or three times before taking to a hole.

I was a little undecided if the pressure had been off long enough to use the dogs, or if we should try booting them out ourselves. Though I didn't know if the area had been hunted this week, I felt pretty sure it hadn't, knowing how the local hunters felt about the area after the first four days of the season. At the last minute I reluctantly elected to leave the dogs at home.

It was just as we reached the ridge that the first rabbit was booted out and fell to Norm's gun. We worked our way along the whole length of the ridge, kicking into every thicket and brush pile. We stomped on every patch of honeysuckle and stuck a boot under every scrubby jack pine, but failed to kick out another rabbit.

At the end of the ridge we stopped



to take a breather. Now it was Norm's turn to needle me. "I told you there were no rabbits around here. Must have been fifty or more guys tramped out this ridge. That ol' rabbit I shot back there was just plain stupid for hangin' around here."

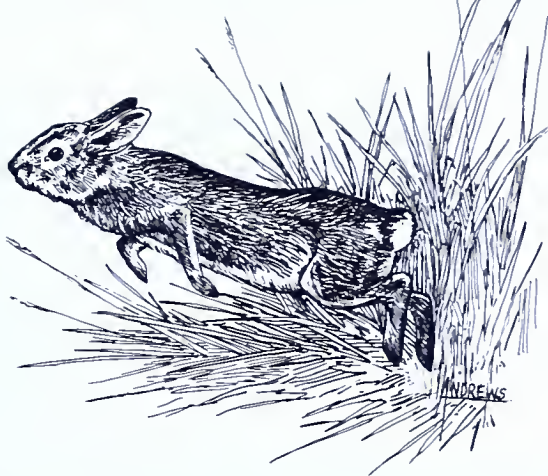
I was not in a very good position to argue the point, but I still was not convinced that he was right. There was plenty of good cover on the ridge and a lot of choice food that rabbits enjoy. But no rabbits.

A large field of alfalfa that lay just below the ridge looked very inviting. With about two hours of shooting time left, I half-heartedly suggested that perhaps we should try the fields.

We hunted the alfalfa field, which contained good cover and excellent food, but no rabbits. We hunted a picked cornfield, but the deer had cleaned up all of the corn left by the picker and we found no rabbits there. We moved into an abandoned field of thick, waist-high weeds. Berry bushes and young hardwoods, sumac and young walnut trees dotted the landscape. We had just an hour to hunt before the close of the season for another year.

Then all glory broke loose. Norm jumped a bunny on the top of a slight rise and stopped him as he struck for a hole among a patch of sumac. As he picked up his game he spotted another rabbit sitting nearby. He booted that one out and Steve and I both missed. Then it was Larry's turn. He tumbled a woods bunny that headed for the stream bed below us. Steve crossed the little creek to retrieve Larry's rabbit and bagged a nice busytail from a walnut tree nearby. A couple of misses in the tall weeds left a few rabbits for seed for next year. In less than an hour we had bagged three rabbits and a squirrel and missed several other cottontails.

As we started across the open field toward the house, another ball of fur tore out behind us and bobbed his white tail in farewell. Four guns



**NORM JUMPED A bunny on the top of a slight rise and stopped him as he struck for a hole among a patch of sumac.**

barked, but not a hair was lost. We were pretty rusty in our shooting. We, like many other hunters, had cleaned and put our scatterguns in the rack at the close of the regular season. We hadn't touched them for over a month and we were rusty.

The rabbits were still fairly plentiful in this late season. They just had to be found. Many hunters miss a lot of fun by not taking advantage of the extra season. If the weather is cold and blustery, or if the snow is deep, you might just as well stay by the fireside. However, if the sun breaks through and the temperature rises, your chances of finding Mr. Rabbit are pretty good in the extended season. Check the sunny sides of the ridges. He may be sitting close to his hole and the shooting will be fast. Hunt the bottom lands where the winter seeps keep grasses green all winter. You may catch Br'er Rabbit eating a favorite meal. Remember, he is fond of sumac bark so you may find him in the abandoned fields as we did. Another good spot, even in very cold weather, is the sod overhang along a creek bank. A place like this can be very productive at times.

Whether you hunt with hounds or boot them out yourself, you can have a ball during the extended season. I didn't bag a rabbit that afternoon, yet I never enjoyed a hunt more—and besides, I think I proved my point.

*Every Hunting, Fishing and Conservation Club in America Is Being Asked to Hold an Open House for the Public, to Dramatize Sportsmen's Contributions to Conservation and to Introduce the Public to Outdoor Skills . . .*

## National Hunting and Fishing Day

By Charles Dickey



**S**EPTEMBER 23, 1972, may be the most important day in the lives of 55 million hunters and fishermen.

National Hunting and Fishing Day officially recognizes the role of America's sportsmen in conservation and outdoor recreation. Resolutions now in Congress not only establish NHF Day, but ask hunters and anglers to lead the public in a rededication to the conservation and respectful use of our wildlife and natural resources. Your sportsmen's club can take the leadership in your community by holding an "Open House" to show your friends and neighbors what sportsmen are doing for conservation . . . and have done for the past 70 years.

An Open House can win new friends for conservation and introduce youngsters to shooting and fishing. No one can do more for hunting and fishing than you, working in your own community on a friendly person-to-person level with your neighbors and business associates. Your club might show exhibits and movies about the sportsman's outstanding contributions to conservation. You and your club can set up skill centers for young people and their parents to participate in shooting, archery, casting and camping . . . really show them what goes on at a sportsman's club and how much fun it is. It's an ideal time to teach them that the American sports-

*Photo by Don Shiner*

**WITH A FATHER OR** older friend to help him, a youngster can quickly learn the sporting attitudes which will serve him in good stead throughout his life.



man is the best friend fish and wildlife ever had.

An Open House might also be used to raise funds for a conservation project by means of a turkey shoot or easting game. Civic leaders will be glad to provide valuable support, and you might well get a newspaper or broadcasting station to co-sponsor your efforts. National Hunting and Fishing Day, along with state proclamations by all 50 governors, will help get publicity for your role as a sportsman in conservation. Imagine what good can be done when clubs like yours hold successful Open Houses all over the country on National Hunting and Fishing Day!

You'll be supported by these important organizations: National Wildlife Federation, Sport Fishing Institute, Wildlife Management Institute, Outdoor Writers Association of America, The Wildlife Society, American Fisheries Society, National Conservation Committee of Boy Scouts of America, National Rifle Association, American Fishing Tackle Manufacturers Association, National Shooting Sports Foundation, International Association of Game, Fish and Conservation Commissioners, Izaak Walton League of

America, National Sporting Goods Association, Keep America Beautiful, Inc., and others.

If you need help getting organized, the National Shooting Sports Foundation, 1075 Post Road, Riverside, Conn. 06878, can supply an Open House Action Manual, with everything planned for you in advance. Contents include complete, step-by-step plans outlining what activities to present, how to get publicity, how to organize an Open House, where to obtain displays and literature, how to get VIP's, and more. Its cost of \$1 covers preparation and mailing.

Conservation needs more friends. Tell some of yours all about it on National Hunting and Fishing Day.

*It is always sunrise somewhere;  
the dew is never all dried at  
once; a shower is forever falling;  
vapor is ever rising. Eternal sun-  
rise, eternal sunset, eternal dawn  
and gloaming, on sea and conti-  
nents and islands, each in its  
turn, as the round earth rolls.  
—John Muir.*

## *Books in Brief . . .*

(Order from publisher, not from Game Commission)

*Wild Game Cookbook*, ed. by L. W. Johnson, Benjamin Co., 485 Madison Ave., New York City, 10022, 175 pp., paperbound, \$2.95. Many delicious ways of preparing big game, upland game and waterfowl for the table. A Remington Sportsmen's Library book.

*British Military Longarms, 1715-1815*, D. W. Bailey. Stackpole Books, Cameron and Kelker Streets, Harrisburg, Pa. 17105, 1972, 80 pp., \$4.95. Well-illustrated volume on the muskets, rifles and carbines which figured in a century of conflict in Europe, America and India.

*The Snowshoe Book*, by William Osgood and Leslie Hurley. Stephen Greene Press, Brattleboro, Vt., 1972, 128 pp., paperbound \$3.95, hardbound \$6.95. Practical information on a method of winter travel which dates back 6000 years . . . "an invention ranking in importance with the wheel."

*Winchester Hunter's Handbook, 1971-72*, by Ed Kozicky, John Madison and David Petzal, Winchester Press, 460 Park Ave., New York City 10022, 188 pp., paperbound, \$1.95, \$2.50 in Canada. A concise rundown on hunting prospects, license fees, etc., in each state and province.





# *The Great Gobbler of Path Valley*

By Archibald Rutledge

**P**ATH VALLEY, in Franklin County, is truly a lovely vale, buttressed on either side by rather tall, heavily wooded mountains. It runs from the Juniata River southward almost to Mercersburg. In the famous academy there, for more than 30 years I tried to teach English. The hunters in the little mountain village were very kind to me. As I had always been a hunter, we naturally drifted together, and they gave me tips on where to find quail, ruffed grouse and turkeys. Moreover, although my school was just halfway between the battlefields of Antietam and Gettysburg, and although I was the son of a Confederate colonel, people could not have been kinder. Some local hunters introduced me to Path Valley and to Bear Valley to the east. I owe them deep gratitude; also I remember the kindness to me of the farmers of the Valley who so graciously permitted this Rebel, far from home, to hunt over their lands.

I was born in South Carolina, educated in New York State, and taught for 33 years in Pennsylvania. I have never found any great difference in people. Although my father, as a Confederate, fought against them, I never had any better friends than the old Federal veterans of the little village. During the tragedy known as the Civil War, Mercersburg was a hot corner. It is on an almost direct line between Harrisburg and Washington. Couriers between President Lincoln and Governor Curtin often passed through this small town. On its streets there had even been skirmishes between Confederate raiders and some of the local citizenry. I once found a Confederate grave in the town's cemetery. It was marked "unknown." I was told that the man was with some Virginians, and had been killed on the town square.

But when I went to Mercersburg, all this kind of thing had passed. At least I was treated as if it had never been. The first winter in Pennsylvania, one of my old soldier friends died. He left me his entire library. One book was the great autobiography of General Ulysses S. Grant. I was touched by the inscription my friend had put on the first page for me: "To my dear young Rebel friend, Arch."

But back to my story. One day while hunting in the Valley, I thought I heard, far across the valley, the sound of a shot. Almost at once I saw this great black-looking bird take off from near the top of the mountain opposite. At first I thought it might be a buzzard; but the absence of circling and sailing made me more and more certain it was a wild turkey. As it came closer, I was sure it was a big gobbler.

## **Too Much of a Miracle?**

He had started on a course for me, but would he hold it? This business of having a great prize among birds fly clear across a wide valley, right into my arms, as it were, seemed too much of a miracle.

There were so many other places he could have gone. He could have flown over the far mountains, and come to rest in western Maryland, perhaps near the great Woodmont Club. He could have gone far along either side of the great mountain on which he had been. He could have headed far to the north of me, toward the Juniata River. He could have flown to the southward of me, and landed on a slope of Mt. Parnell. But, no; he was coming for me, and coming fast, his bulk rapidly increasing in size. From where I was standing I could see some of the farmers in the Valley point excitedly at the great trophy passing powerfully over them. They

identified him. I could see that. One man actually ran back to his house to get a gun, but by the time he reached his yard, he saw it was too late.

I once wrote a poem called, *Something Is Always Happening to Me*. Well, here it was: the noblest game bird in all the world, flying straight at me.

I was in a little clearing about 100 yards above the Path Valley branch of the Conococheague Creek. On either side of me towered two mighty white oaks. It looked as if the big gobbler was coming between the oaks; indeed, for a few seconds I wondered what I would do if he alighted on me. But he was still fairly high, though he was fast coming within range.



I DID NOT WANT to shoot the gobbler in the breast, tearing him to pieces, so I waited until he swept over my head and shot him in the back.

I take this moment to give an unasked-for word of advice to younger hunters. I have hunted for over 80 years; and though I am now 87, I still hope to bring down another buck or another gobbler—or both.

### Know Your Gun

A hunter should marry his gun; that is, he should not borrow a strange one, or hasten to get a new one. By not being divorced from one gun, he learns to love her, to know her capacity, and to learn at what distance she is deadly. When I say “gun,” of course I mean a rifle, too—any firearm of the chase.

There is another caution that any hunter should steadily develop. This is the ability to judge distance. For example, a young hunter told me he had shot a big buck running at full speed through the woods at 300 yards. I did not tell him what I thought, but what I conjectured was this: he did not know the meaning of 300 yards; then I doubted if he could see a buck running through the woods at that distance (which is pushing a quarter of a mile). Every hunter must remember that there is a limit to the accuracy of his eyesight. In South Carolina I once killed a buck with a shotgun and buckshot at 105 yards. I was shooting an old 32-inch Westley-Richards; the deer was standing, and one buckshot broke his back. The performance was a miracle, and we must not expect those in hunting. Miraculous feats may happen in hunting, but they should not be expected.

I now return to my great Path Valley gobbler. On he came, as if he had a compass bearing on me. While he was still 200 yards away, to avoid his seeing any motion by me, I got my gun up. I would give him the choke barrel loaded with No. 2s. He was flying about 60 yards high, and kept coming in strong, level, purposeful flight.

I have studied a great deal the speed of birds in flight. The duck hawk is one of the swiftest; but I have seen a



Wilson snipe outfly and outdodge one. Teal are very fast, and mallards and black ducks can fly at about 60 miles per hour. But the speed of anything usually depends on what is after it. I have seen a mallard, pursued by a bald eagle, do about 75. Yet there is deep wisdom in old Satehel Paige's advice, "Never look behind you. Something may be after you." However, in such circumstances, I think it quite likely is far better to know than not to know.

As my gobbler drew nearer, it stopped beating its wings. It was coming lower, and was now sailing in. I did not want to shoot him in the breast,

tearing him to pieces. Some hunters believe that a wild gobbler should be shot in the head. But that is very risky business. A wild turkey can jerk his head about so fast that if a hunter aims at that alone, he may miss the turkey altogether. I have shot 107 gobblers—most in the South, where a number may be taken each season—and I always take one in the back if I can. When this great bird swept over my head, I turned, and just as he spread his great wings to alight, I shot him in the back. He never knew who threw the brick. A noble prize was mine—the great gobbler of Path Valley.

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### Sportsmen Don't Litter

Vindication of the sportsman concerning littering came recently from statistics gathered by Keep American Beautiful, Inc. Of all categories of people using the outdoors, sportsmen were the least offenders with litter. They were responsible for only five percent of the litter in rural areas investigated. Picnickers were responsible for 25 percent and passing motorists for 70 percent.

**GLENN L. BOWERS**, Executive Director of the Game Commission, center, is shown receiving an inscribed silver tray from **Ray Wagner**, president of the Southern Division of the Pennsylvania Federation of Sportsmen's Clubs. The presentation was made in recognition of his outstanding leadership in the field of wildlife management and for his dedication to duty. Also shown are **George Garrett**, immediate past president, **Clayton Shenk**, secretary, and **Ed Schneider**, treasurer.





DICK WALKER AND BILL D'AMICO, of Youngstown, Ohio, were among the 46 entrants in the Big Shenango canoe race in 1971.

## Big Shenango River Canoe Race

By David S. Bair

**I**N APRIL OF 1968, GAME NEWS published my article, "Big Shenango Float Trip." The opening paragraph read, "You can drive from Greenville to Jamestown, Pa., on Route 58 in less than 15 minutes. You can float from Jamestown to Greenville in a flat-bottomed duck boat or canoe on the Big Shenango in five hours."

The closing paragraph of the story read, "Every inch of the trip is worthwhile, and I hope more people in Northwestern Pennsylvania will make

the float trip from Jamestown to Greenville. . . ."

Well, more people have made the trip and the travel time has been cut. Each year since 1968, more and more canoeists have made the trip, and in May, 1971, the Greenville Recreation Center—under the direction of George Walko—inaugurated the first canoe race during the Ninth Annual Family Camping Workshop at Greenville's Riverside Park.

The first canoe race drew 46 enthusiastic entrants—young and old, men and women—from near and far. The race started at 10 o'clock on a bright Saturday morning with canoes leaving the Jamestown starting point at three-minute intervals. Friends, neighbors, relatives, campers, and spectators cheered their favorite teams at the three bridges between Jamestown's Pymatuning Lake and the Greenville Recreation Center.

The great blue herons left the Big Shenango River that Saturday for the Little Shenango River and Crooked Creek . . . too much traffic on the bigger river. The contestants didn't see the wildlife that morning. They saw







the rapids and hazards coming up fast. They were racing against time. Some canoes upset, some were passed by late starters. All had a good time and gave their all to the race against the clock.

The winners were elated. They got the big trophy. The winners had purchased their own canoe by saving their odd-job money and collecting bottles and glass. They purchased the type of canoe they wanted, bought extra-wide paddles, and trained as a team.

Two 18-year-old Boy Scouts from Oil City, Don Le Gaoullon and Gary Faller, paddled the good race and won the first Big Shenango Canoe Race. This year there will probably be 100 or more entries, and the winning time may be cut.



**THE WINNERS**—Don Le Gaoullon and Gary Faller, both 18, of Oil City, Pa. They covered the 10-mile course in one hour, 44 minutes and six seconds.





## Meanwhile, Back at Camp—

By Carsten Ahrens

**G**ETTING BEYOND 65 is nothing to boast about but it's mighty satisfying. I'm the only one in the gang now who can really enjoy camp. I'm here in the wilderness all summer, plus generous slices of spring and fall and mild spells in winter, though the shelter would be far from comfortable in really cold weather. All the rest of my buddies have to get back to town come Sunday night in order to punch the time clock come Monday a.m., while I'll be out fishing, hunting, or picking black caps, or just watching the squirrels, snakefeeders, or a sunfish. It gives one a chance to review old memories of good companions and good times and to cogitate on the things going on around one instead of worrying about oneself.

*"... the reason birds can fly and we can't is simply that they have proper faith, for to have faith is to have wings. . . ."*

I refrained from putting out the

bird feeder last summer at camp for I didn't want the birds to become dependent on a food source that would stop when I left and winter approached just when they would need handouts most. But back in town I feed them as long as there is snow.

A good half of my years have been spent in a large metropolitan area where in spite of all the people, there are a good many birds. They were here first when these hills were theirs, and they intend to stay. I hope they do. We have a "bird stump" in the yard, well out of the reach of the city dogs that make their rounds in defiance of the city ordinance that would keep them from running loose. Grains, sunflower seeds, suet and table scraps bring a variety of winged forms to the stump. No matter how deep the snow or ice, winter around the stump is never dull. A trip to the window rewards with the audacious colors of red bird or blue-jay.

The robin prefers the table scraps.



Downy and hairy woodpeckers seek only suet. Ringnecks, song sparrows, cardinals, and juncos take to the seeds and grain. Starlings, nuthatches, blue-jays, English sparrows, Carolina wrens, titmice and chickadees take some of each.

Once in a blue moon a wandering band of evening grosbeaks, a dove, a purple finch, or several kinglets pay a call.

At first glance, birds of the same species all look alike, but when one sees them daily, he begins to notice individual differences and finally each takes on a definite personality.

An interest in birds adds greatly to one's outlook on life. One cannot know loneliness when his bird stump is flashing with the grace and variety one finds on wings under gloomy skies.

However, I'm not always certain that my largess with bird food is wise. Even as I write, two male cardinals hatched last spring and now larger than their mother are standing amid the grain and screaming while the old bird heroically attempts to sate both appetites at the same time. Will they ever learn to reach down, pick up the cracked corn, and feed themselves!

*"... the banker bees are busy  
with their gold. . . ."*

It was mid-summer before I acquired the apparatus necessary to maintain a hive of bees at camp, so when I examined the store of honey that had accumulated by mid-September, I decided not to remove "my share" or the insects wouldn't have enough for themselves this winter.

My dad always kept bees; few possessions gave him more pleasure. All through my youth, every fall found a 20-gallon stone crock in the basement more or less filled with honey he had extracted from the comb. Many a long winter's night was made magically short and sweet in boiling down and then pulling the honey until it became blond, delicious taffy. Dad never had rheumatism and he insisted the few

stings he received each time he took his percentage of the honey crop kept the rheumatic aches away.

When a bee colony has a population explosion, the situation is nicely solved by the old queen's taking her half of the thousands of subjects and allowing a new queen to reign with the rest of the bees in her stead. Dad never liked to lose a swarm, so he usually had an empty hive for the emergency of swarming. The angry, winged thousands would usually settle on a branch of a nearby apple tree and Dad would saw off that limb so that the brown, crawling mass would drop into the hive. The bees, after looking over the new place, usually decided to stay. But if no hive was available, the swarm would take to the air and, following their scouts, might vanish completely.

#### Truth Beyond Doubt

In our township, it was truth beyond doubt that noise would bring down a runaway swarm of bees. I can still see, running across the fields, Dad, Uncle, Hired Man, Auntie, Cousin, and then us children, from the eldest to the youngest (incidentally, we called her "Honey"). Each had a noisemaker of some sort: a hammer and a sheet of metal, two tin pans, a cow bell, sleigh bells, or whatever. But never did the bees pay the slightest attention. We must have resembled those who took off with equal success after the "gingerbread man."

*"With the calm patience of the  
wood, I wait*

*For leaf and blossom when God  
gives us spring."*

I've never spent a winter at camp. Our neighbors, the Hansons, more than once have written "... we can only see the ridgepole of your cottage above the snow ... on their Christmas cards. I don't think I'd have the "patience of the wood" of the poet.

When my brothers and I were farm boys, we often found the days of Jan-



**A TEST TUBE** of Mom's vinegar, viewed through a hand lens, revealed numerous nematodes—enough to make her want to pour it all down the drain!

uary and February monotonous, especially those years when snow lay waist deep, when hunting and fishing through the ice were impossible, and winter seemed never to turn the corner to meet spring.

The arrival that put faith into all of us during those dour days were gorgeously impossible catalogs sent out by the seed houses and nurseries. I've always felt some foundation should award medals to those companies that made our gardens lying under three feet of snow produce cup-sized strawberries, dahlia blooms a foot across, single trees that bore five varieties of apples, and other marvels. Auntie always set aside a portion of the egg money in the sterling silver coffee server for the purchase of next year's seeds. If the pot held more than was needed for the packages of mundane bean, beet, carrot, parsnip, and such, then we ordered such botanical concoctions as Mongolia wool flowers, Chinese lantern plants, Abyssinia daisies, Ginkgo trees. Though we planted,

watered and cultivated with loving care, our results seldom resembled the pictures in the catalogs. Our soil or climate or something just wasn't right for the likes of these exotics. Only a Ginkgo grew.

*"... a little learning ..."*

Young Hanson stopped by one day and left a gallon of cider, freshly pressed. "You'll like it," he predicted, "it's one hundred percent northern spy."

As I sipped the fragrant, amber liquid, memory took me back some 40 years. I had returned home after the first term of my freshman year at State, and I almost upset Mother's apple cider barrels.

"Mother, did you know you have living creatures in your famous cider?" I asked with feigned innocence.

Mother was indignant. "Preposterous!" she said. She had scores of customers of 20 years' standing who depended on her dilute acetic acid made of northern spy apples, for condiment or preservative. In our enormous basement, seven barrels lay in a wooden row along the whitewashed walls.

Downstairs I went, whistling, and soon returned with a college test tube of Mom's vinegar. She held it to the light and insisted she saw nothing. But when I supplied a hand-lens, she screamed and dropped the container, and as it shattered, so did her proud belief in her unassailable vinegar. She was going to pour it all down the drain! I was two days convincing her that the tiny nematode worm, *Anguillula aceti*, was harmless and usually numberless in country apple vinegar. What she found especially distressing was the fact that they had been there all the time and she had never dreamed there was anything alive and kicking about in *her* vinegar.

But after she recovered, she even got some fun out of it. One day she donned her sunbonnet and went calling on Mrs. Turner, her next-farm neighbor and also her only rival in



vinegar sales. Mrs. Turner went through the same traumatic, frustrating ordeal Mom had experienced when the hand lens revealed the awful truth. But her recovery was slower. She was a big woman, much given to gesturing, and I can imagine her reaction when Mom said, "Gert, do you know you have worms in your vinegar?"

*"If it weren't for us conservatives, there wouldn't be anything left for you progressives to give away!"*

On one summer day for many years, a society of conservationists has been granted permission to use the grove near camp for their annual rendezvous. They approve of our little stream that dashes by, cold and pure, unimpeded by beer bottles, cast-off tires or other junk, on its way to the lake. They are a well-meaning group . . . I've long been a dues-paying member . . . but when I think over the leaders who have addressed us through the years, I'm aware of how far apart well-meaning people can be.

#### **Battle Lost?**

About one-fourth of our speakers feel the battle over conservation is lost. The planet is beyond hope and they have the figures to prove it! Air and water are hopelessly polluted; the best topsoil has washed away; minerals are criminally wasted; wildlife and plants are doomed by the population explosion. There's nothing to be done but wring one's hand and lament the lost beauty of the spacious skies, and the creeping, all-encompassing concrete blanket that is surely covering the purple mountain majesties and fruited plains.

Another fourth gets starry-eyed about every daisy, deer, and tree. Everything wild the Creator has made is sacred. A natural resource is something to be worshipped . . . not used. They could never understand, for example, that a given area can support only a certain number of deer and

that starvation is crueler than a hunter's bullet. "Only God can make a tree," they recite, and refuse to accept the idea that a forest like a crop of wheat should be harvested when mature.

#### **No Cause for Alarm?**

Another quarter is equally ecstatic about man's ability to plan the future. Don't worry about a thing, they say. Sure, there's pollution, soil erosion, over-population, disappearing natural resources. So what? Man with his intellect, resourcefulness, and technology will always create more than he destroys. When the conventional fuels are used up, he'll turn to more complicated sources. When the metals are gone, his plastics will be perfected to stand any stress and strain. One of their biggest bag of tricks is the ocean. Since the beginning of time, hasn't everything on land sooner or later been washed into the sea? And once it's there, can it get out? It can not. So if salt-free water or any of the ocean-held elements are wanted, man can extract what's needed from the ocean depths. Food to feed the multitudes will come from the broad meadows . . . millions of square miles wide . . . of the sea. Here are countless tons of algae and plankton rich in all food requirements just waiting to be utilized!

The last quarter includes men and women who feel that the fight for clean water and air can be won; that cover crops, proper cultivation, and reforestation can save the soil; that all the overwhelming problems of thriving earthlings will be worked out—indeed, have to be solved—if the species *Homo sapiens* is to continue to exist on earth. Before each election, loud voices join this group of active conservationists, and after the fireworks, more and more of these vocal ones continue the fight. As I sit in my camp and ponder this, the most serious problem in mankind's history, I do believe we'll win. We have to.

# Worm Parasites and Hunting Dogs

By Nick Sisley

With the Assistance of Wm. P. Barchfeld, V.M.D.

**T**HIS ARTICLE is written to help hunting dog owners keep their animals free of worm parasites. It will show the life cycle of the four most important worm parasites in order that the reader may better understand how they affect hunting dogs. In turn, it will present the symptoms of each individual parasite and the various means with which they can be cured. The parasites discussed will be tape, round, whip and hook worms.\*

Tapeworms are flat, segmented worms which can readily be seen in an infected dog's stool. They are about 3mm in width and 10-15mm in length. (There are 25.4 mm in an inch.) When found in a dog's stool they are actually fertilized egg sacs ready to begin the life cycle all over again. House flies, fleas, and rodents eat these eggs and become the "intermediate host." Within these animals the tapeworm egg changes into the larva form. A dog must eat the larva through an infected fly, flea, or rodent (rabbits included) to become infected himself. The dog then becomes the "definitive host." Within the dog the larva form reaches maturity in the intestine, begins fertilizing egg segments which are passed in the stool, and the life cycle continues.

Diagnosis symptoms are dull coat and, of course, presence of the segments in the stool. A tapeworm absorbs digested food that the dog has already expended energy in making. Their effect on a hardworking dog is directly proportional to the amount of worms contained in the dog; i.e., the more food energy the worms absorb, the less energy the dog has left for himself. Letting a dog eat the

liver of a freshly killed rabbit is a common way for him to get tapeworms. Many rabbits are infected and the larva stage is microscopic, so you can't see them.

Treatment depends on the age, condition, and constitution of the individual dog. Three medications are available and your veterinarian should choose which one your dog should have. Patent medications are also available and it is felt that most are safe to use, but three months later your dog may still be burdened with tapeworms. In other words, they're not highly efficient in many cases. Veterinarians are trained professionals. No part of this article is intended to promote treatment by the dog owner. Seek the advice of your veterinarian frequently. He has a wealth of knowledge at his disposal.

The second type of worm parasite to be discussed is the roundworm. Roundworms are prevalent throughout the world in carnivorous animals. In dogs the eggs are passed in the stool, and the larva form develops in or near the surface of the ground. The larvae are quite hardy and under

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\*For a discussion of a fifth worm parasite, see "Heartworm Disease in Dogs," by R. Lee Pyle, B.S., M.V.D., in the October, 1971, GAME NEWS.

*The illustrations with this article are by courtesy of the University of Illinois, Agricultural Experiment Station, in cooperation with the College of Veterinary Medicine, from "Microscopic Diagnosis of Parasitism in Domestic Animals," Circular 698, 1952.*



ideal conditions may live for years. The dog eats the microscopic larvae which develop into adults (two to four inches long) within the dog's intestinal tract. The larvae move freely within the dog's tissues and concentrations of them can cause severe lesions in many parts of the body. Larvae present in a pregnant female can pass directly through the tissues to the unborn puppies to develop into adult forms. Roundworms are food eaters like the tapeworm; again, their effect on a dog is directly proportional to the degree of infestation.

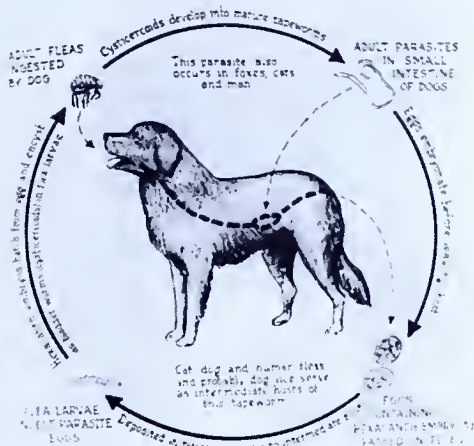
In older dogs roundworms don't present too much of a problem, but they can wreak havoc with a litter of pups. We've all seen pot-bellied pups, but when that condition is coupled with diarrhea, lack of growth, and a general rundown state, the litter is not getting a normal start in life. Such infected pups often never get over their "dog tiredness," may have one or more of their senses affected, etc. Consequently, it is most important to see your veterinarian before breeding your female. If she has roundworms, get rid of them before she's serviced.

### Microscopic Detection

Diagnosis of roundworm is microscopic detection of eggs in the stool. This requires seeing your veterinarian, of course. Treatment is with piperazine or hexylresorcinol. These medications stupefy the adult worms and they are passed. One treatment is seldom enough as larvae in the dog will be changing to the adult form for some weeks. The source of infection must also be eliminated. A strong salt solution sprayed or sloshed on the dog's run will kill the larvae. Keeping a dog up on wire will also eliminate ground contact. Regular spraying of a concentrated salt solution in the dog run not only eliminates roundworms, but whip and hookworms as well. Wire runs accomplish the same end result, but I

### LIFE HISTORY OF A TAPEWORM OF DOGS

*Dipylidium caninum*



prefer not to keep a large dog on wire.

The third discussion will deal with whipworms. The adult form is 1½ to 2½ inches long and "slender as a pin." The end thickens and thus the name, whipworms. Eggs are passed in the stool. The eggs are eaten by the dog and travel to the upper portion of the small intestine where the larvae develop. In about 10 weeks they become adults and move to the caecum or "blind gut," living for about 16 months (producing eggs) before dying of old age. The term "blind gut" comes into context because it is an appendage of but off to the side of the lower large intestine. Medications given in the past were usually ineffective in controlling the parasite because in going through the intestinal tract they never reached the worm. Its peculiar position in the blind gut made it a problem. Recently, new drugs (phthalofyne and glycobiasol) have been developed. They can be administered orally or intravenously. The worm eats the drug, dies, and is passed. It is completely effective.

Diagnosis of whipworms is through detection of eggs in the stool—again the microscope and veterinarian are needed. Symptoms are not apparent with a light infection. As numbers in-

crease, dogs experience loss of weight, diarrhea, fresh blood in the stool, anemia and a nervous and highly irritable state. With the new drugs available, there is no reason to have a dog suffer from whipworms.

Whipworm eggs cannot live under dry conditions. Elimination of moist areas around your runs and regular sprayings of a saturated salt solution highly reduce the possibility of infection. Again, wire runs help solve the problem, too.

The fourth worm to be discussed is a blood sucker, the hookworm. The mature female is about 15mm long and very thin. She lays about 1000 eggs every day of her life. The eggs hatch in 48-72 hours and the larvae are infectious if eaten by dogs in five to seven days. The microscopic larvae are capable of penetrating the dog's skin, but most are taken in by eating. Once ingested, the larvae become adults, hook themselves to the lining

worms have a remarkable reproductive capacity, and an infected dog will deteriorate rapidly. Hookworms are the *major* killer of young pups. Symptoms are anemia, hemorrhage, blood loss, lesions where the hookworm was affixed and skin problems caused by larvae penetrating the skin.

### Ideal Breeding Grounds

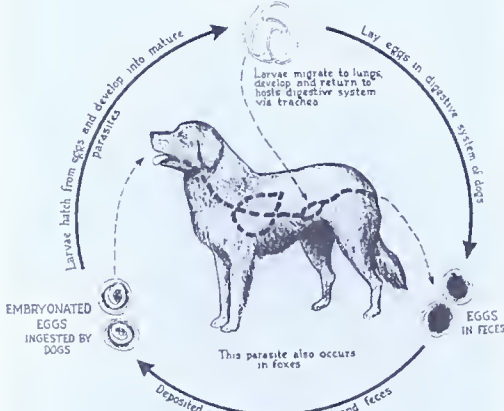
Shaded earthen runs offer ideal breeding grounds in warm weather. Regular salt spraying of runs or wire runs materially reduces the possibility of infection. A subcutaneous injection of disophenol will be absorbed by hookworms. It kills them and they are in turn passed. This medication is completely effective. Other oral remedies are available. In a highly infected puppy or mature dog, the degree of anemia may require an oral or injected addition of iron or liver extract. This is, of course, to replenish the blood supply which has been depleted by the hookworms' feasts. As a last resort, blood transfusions have been known to pull a dying dog through. Again, early diagnosis and treatment with the highly efficient disophenol will prevent hookworm spread. Spraying runs regularly with saturated salt solution or keeping dogs on wire materially reduces the possibility of infection.

It must be kept in mind that parasites don't cause all puppy and dog diseases. Many patent remedies are available for parasite control, and when you see your dogs not looking in the pink, you shouldn't diagnose it as worms and give a dose of some patent worm medicine. These remedies are poisons made to poison the parasite. They also poison the dog. When properly administered, the poison only causes the dog minor hardship. It is possible, however, that your dog suffers from another malady and giving him such poison may greatly aggravate the condition. It's best to consult your veterinarian. He attended highly specialized schools

### LIFE HISTORY OF A ROUNDWORM OF DOGS

*Toxocara canis*

ADULT PARASITES  
IN SMALL INTESTINE OF DOGS



of the intestinal tract and begin living on blood.

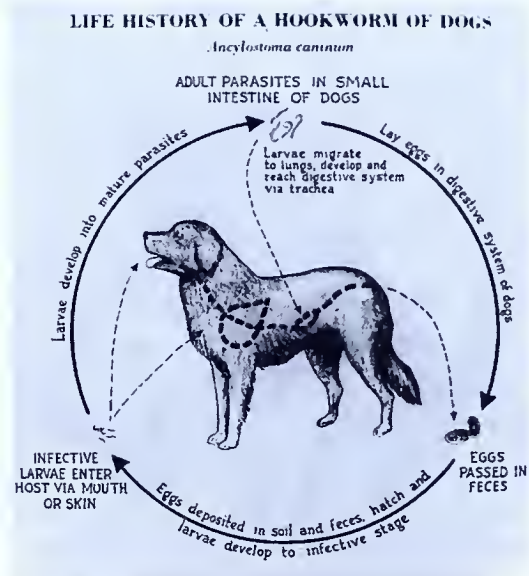
Symptoms in mature dogs are minor if the number of worms are few. Mature dogs also acquire a partial immunity, but this immunity can be broken down if a dog suffers from malnutrition. If such is the case, hook-



in the same manner your family physician did. Some veterinarians even specialize in treating hunting breeds.

If you keep your hunting stock on wire or spray the aforementioned salt solution regularly you've come a long way in keeping worm parasites to a minimum. But remember, dogs aren't always in their runs. In training and hunting season, you've got them in the woods and fields plenty, or you should have. They'll pick up and eat just about anything they find, too. A yearly veterinarian checkup is the minimum to make sure your dog's in top-notch condition.

All dog owners should be cognizant of the hazards of worm parasites, but for owners and breeders it is doubly important. Puppies suffer terribly with infections of tape, round, whip, and hook worms. To insure a worm-free



litter, a trip to the veterinarian before and after pregnancy is the best insurance policy.

## Available Publications

The following publications are available from the Pennsylvania Game Commission, P. O. Box 1567, Harrisburg, Pa. 17120. Prices quoted include taxes, handling and postage.

*Gone for the Day*, by Ned Smith. All of the outstanding columns and artwork which appeared under this title in *GAME NEWS* during a four-year period. Delightful reading for everyone. 216 pp., \$2.00.

*Pennsylvania Trapping and Predator Control Methods*, by Paul L. Failor. Everything you need to know to trap any of the state's furbearers. 116 pp., 50 cents.

*The White-Tailed Deer in Pennsylvania*, by Stanley E. Forbes. Detailed information on all phases of the whitetail's life. 40 pp., 50 cents.

*Pennsylvania Birdlife*, by Leo A. Luttringer. Fascinating data on all the birds normally seen in the Commonwealth. 128 pp., \$1.00.

*Bird and Mammal Charts*, by Ned Smith. Set 1 (20" x 30") \$2.00. Winter birds, marsh and water birds, waterfowl, birds of prey. Set 2 (20" x 30") \$2.00. Mammals of farm and woodlot, mammals of the mountains, birds of the forest, birds of field and garden. Set 3 (11" x 14") \$2.25. All eight charts listed in Set 1 and Set 2. Individual charts not sold in either size.



## *Dear Game Commission . . .*

Pennsylvania Game Commission  
Harrisburg, Penna.

Dear Game Commission:

I am writing this to report an accident that happened to me a couple weeks ago while fox trapping. That little book I got with my hunting license says to report accidents within 72 hours, but since I wasn't shot, maybe I don't have to report it at all. I would have asked the Game Warden, but I can't get near him.

In fact, I can't get near anybody. I am so desperate for contact with a fellow human being that the other day when I saw a man I have been dodging for two years because I owe him some money, I walked right toward him, fumbling in my hip pocket for my wallet.

Before I got within 40 feet, he jumped into his car, slammed the door, and stepped on the starter. As he took out of there, he yelled, "No hurry

about that five dollars. You can give it to me after the first of the year. Better yet, keep it until around Easter."

But you probably have troubles of your own, and aren't interested in mine, so I will get on with this Accident Report.

I had done pretty good with small game, and was nearing my season limit except for turkey, so I decided to set out a line of fox traps. I make my own lure from a secret formula I wouldn't want to divulge, but some of the milder ingredients include asa-foetida, pure essence of skunk, and liquid extract of decayed tom cat. It is real hairy, two-fisted stuff that will reach out three miles, grab a fox by the nose, and drag him to the trap whether he wants to come or not.

I can show you fox skins in the fur shed with their snouts stretched out like an anteater's. The fur buyer says that it was caused by me hanging the wet pelts by the nose, but he just wants an excuse to knock a buck or



two off the price.

Well, I had set one trap, and was walking on to where I intended to put the next, thinking how pungent the aroma of that lure still seemed, even after I had gone half a mile up wind, when I felt something trickling down my leg. The cap had come off the lure bottle in my coat pocket, and the stuff had soaked through my coat, my pants, my shirt tail, and down my leg into one boot.

I shucked those duds faster than a strip tease girl on piecework, and threw them under a thorn bush. Everything reeked with a fox's version of Chanel Number 5 except my cap and one boot and sock. Since I would have looked kind of silly wearing one boot and sock with the other foot (and the rest of me) bare, I threw them under the bush too, and started for home, stopping at every creek I crossed to take a bath and scrub myself with sand.

I got home around dark wearing a laural wreath around my hips and looking pretty patriotic: red where I had been scouring with sand, white where my swimming trunks kept me from tanning last summer, and blue around

the lips from the cold.

Since then, I have tried bathing in vinegar and tomatoe juice like you do with a dog that catches a skunk. I have also tried tractor fuel, mange cure, and sheep dip. Standing in the smoke from green hemlock seems the best. It doesn't remove the smell either, but it is warmer.

I tried to report this accident to the local Game Warden, but he turned a sort of cheesy green, swallowed a couple times, and rushed off before I had said a dozen words.

I called on the phone, and his wife answered. However, she had to hang up right away. She said something about a gas leak, or rubber boots on the hot air register. Do you suppose she could smell this stuff over the phone?

I am going to smoke this letter over a smudge fire a couple of days, let it air off over night, and hand it to the mail man on a long pole.

If you have any questions concerning this report, I will be glad to explain more fully. You can find me in the barn.

Sincerely,  
Ray Beck

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## 224 Caliber Bench Rest Match

The Wellsboro Rifle Club has since 1967 sponsored the Pennsylvania State 224-Caliber Bench Rest Championship rifle match. In this match, rifles must be 224 caliber, scopes not over 10x, with a combined rifle/scope weight not exceeding 10½ pounds. Matches are fired at 100 and 200 yards, with a possible score of 500-50X. Current state champion is Carl Freeman, of Wellsboro, with a 477-17X score. The next match will be in late May, 1972. For complete information, write to the Wellsboro Rifle Club, Box 191, RD 6, Wellsboro, Pa.

### Powerful Stuff

White-tailed deer fawns double their weight in 15 days and quadruple it in a month. The phenomenal growth is due to the richness of the mother's milk, which contains twice the solids of a Jersey cow's and three times the fat and protein.



1. Brilliantly colored songbird weaves basket-like nests, above, in upper branches. B..... O.....



2. An insect catcher incubates eggs on bare cinders. N.....



3. Holes dug in sandy bank are nest of an evening flier. B..... S.....

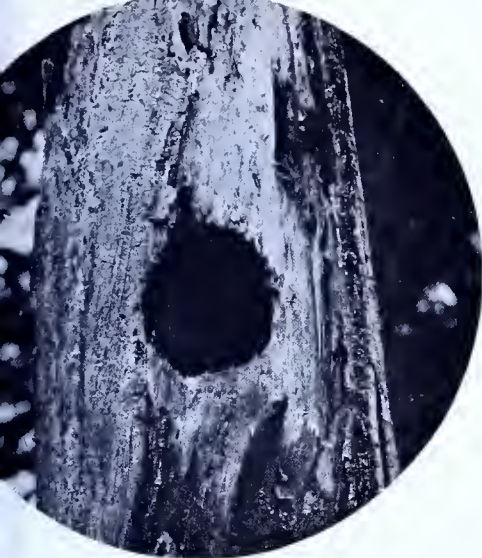


4. Marsh bird, with distinctive song, weaves nests among reeds. R..... B.....

## Home

**Q**UICK NOW—what build? You're right but hides its eggs among other birds, however, and They use various material design. You can gain kinds of birds in your find. But don't inspect often causes owners to can examine deserted r interesting sideline to may discover a pileated which carries power to of mud built by a swa Shown here are nests o identify them? Answers





5. Noisy bird which feeds on ants, digs holes in tree trunks for a nest.  
F.....



6. Small bird, with pleasant song, weaves nests in low bushes.  
S..... S.....

# nest

Does the wild turkey build an elaborate nest, or does it use forest litter. Many birds are architects and builders. Some build nests of distinctive shape. Gain knowledge about the different types by studying the nests you find during the summer, as this is the best time. During the fall you might find one that this might make an interesting outdoor interest. You might find a nest in a line pole cabin, or find a nest on the eave of the porch. Can you find your own birds. Can you find 15.



7. Game bird nests among grass in open fields. R..... P.....

By Don Shiner



8. Old tree hollow serves as home for waterfowl.  
W..... D.....

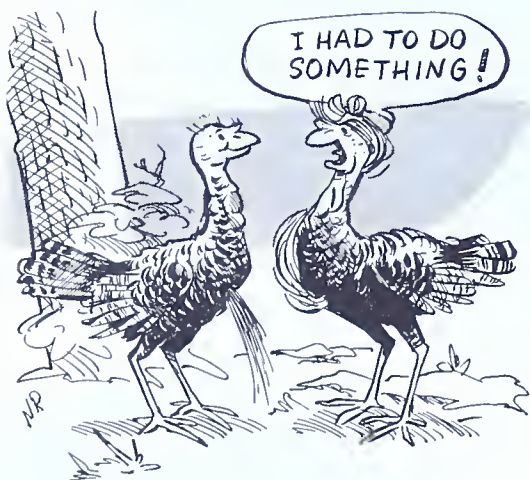


# FIELD NOTES



## Quite a Variety

**ALLEGHENY COUNTY** — My neighbor, Jack Schweiger, called late one night and asked me to come up and see what was in his window well. Since I've been a Game Protector, I have removed raccoons, skunks, opossums, rabbits, screech owls, moles, muskrats, squirrels and one time an injured robin from window wells, but this was the first time I ever saw a full grown mink in one. We put the dogs in the garage and I lifted the mink out with a rake and off he went on his merry way.—District Game Protector R. B. Belding, Baden.



## Big Bird Country

**FOREST COUNTY** — It looks like spring gobbler hunters should do very well in this area in May. Nice flocks of birds are being seen throughout my district, and some are sporting beards of up to 11 inches.—District Game Protector E. C. Taylor, Tionesta.

## Stuck Skunk

**MONTOUR COUNTY** — I investigated a call from a woman concerned about a skunk she had seen sitting along a railroad track, apparently injured, shivering and unable to move. She said it was very friendly and let her pet it. Well, I found the little fellow sitting along the tracks. A cautious survey revealed that our friendly polecat had its two front feet frozen to the iron rail. The temperature had dipped near zero the night before and it was only 16 degrees at the time. The skunk probably had passed through a nearby spring run and attempted to cross the metal tracks, and his wet paws froze fast on contact. Using a 10-foot "pole" I managed to free this "cat." It left a little sweet essence of skunk behind and departed for the nearby woods.—District Game Protector R. W. Donahoe, Danville.

## Daily Double

**HUNTINGDON COUNTY** — Early on January 19, Calvin Knode of the Hesston area hit an adult female deer, the collision causing approximately \$75 damage to his car. The following morning he hit a button buck at the same location with the opposite side of his Ford, causing another \$100 damage. Auto-deer collisions are quite common in this county, with most of all roadway and deer crossings claiming three to several dozen deer per year, but this "double" was a first for this particular area.—District Game Protector R. D. Furry, Huntingdon.



## Thinks Big

**WASHINGTON COUNTY** — At a meeting of the Charleroi Sportsmen's Association, a member told me he has a completely red hunting outfit, boots included. The gentleman went on to say that while deer hunting up north he wounded a buck. Following the blood train in the snow, he stopped by a large hollow tree to look around. There was a blood spot on the tree. While standing there he looked down and saw an opossum licking the blood spot. Upon seeing the red boot, the opossum left the small red spot and started to lick the boot. After a few lieks, a discouraged-looking opossum looked up as if to say, "What are you trying to pull, fella?"—District Game Protector J. Kazakavage, Washington.

## When Will We Learn?

**BRADFORD COUNTY** — During the summer months, the Bryn Athyn Boys Club Camp has the youngsters clean up a stretch of Schrader Creek and the road running along the stream. During the summer this stretch is clean of litter. However, now that these hard-working boys are back in school, the area looks disgusting. In any event, these boys deserve a lot of credit for trying. — District Game Protector D. B. Beach, Towanda.

## It's Possible

**CENTRE COUNTY** — The "No Dumping" and "No Littering" signs have obviously failed to prevent the misuse of our highways, woods and streams. Is it possible that a person capable of this type of action never learned to read?—District Game Protector D. Sloan, Bellefonte.

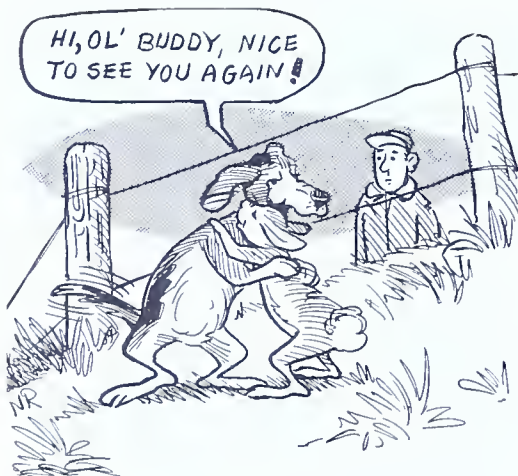


## Prepared

**LUZERNE COUNTY**—On Thanksgiving day we had approximately 28 inches of snow, which stayed for the opening day of buck season. Then on the first day of the season at 10 a.m. it started to snow and later changed to a heavy downpour of rain. A hunter told me that at 4 p.m. he saw an object coming down a steep hill. Even after studying it through his binoculars he could not identify it. When the object came close he saw it was a hunter carrying an umbrella. Some hunters always find ways to keep comfortable regardless of weather conditions. — District Game Protector D. E. Overcash, Stroudsburg.

## Rarity

**YORK COUNTY**—Answering a call about a crippled deer in the Davidsburg area, I found a nice 7-point buck that was paralyzed in the back end. After putting it out of its misery, I tried to determine how it was injured. I found a 4½-inch antler tine from another buck imbedded in the spine between the shoulders of the deer. This is the first deer I have picked up in 13 years whose death could be attributed to having lost a fight with another buck.—District Game Protector R. W. Ruths, Mt. Wolf.



### Partners

**CUMBERLAND COUNTY**—Now I know why beagles chase rabbits! One of our local sportsmen was running his beagle at the Shippensburg Fish and Game Club's dog training area. It jumped a rabbit and the chase was going fine until the rabbit stopped. The sportsman ran to get the rabbit before his dog, because he didn't want the dog to kill it. But the dog beat him to the rabbit. However, when the sportsman saw what happened next, he couldn't quite believe it. His dog ran up to the rabbit and started licking it. Do you suppose the dog just wanted to be friends?—District Game Protector J. Beard, Shippensburg.

### The Last Straw

**WESTMORELAND COUNTY**—For Thomas Slewinski of Jeannette, the morning of October 9 was nothing but hurry, load the car in the dark, hook up boat and trailer and get out to Loyallhanna Dam. After arriving in the rain and having a friend take him to the opposite shore in the boat, Tom opened his duffel bag to get his decoys—only to find he had a bag of old shoes. And they wouldn't even float.—District Game Protector S. E. Lockerman, Pittsburgh.

### You, Buddy—You!

**DAUPHIN COUNTY**—Question of the month from a young Cub Scout: "Who is there to protect the wild animals and birds when you can't be there?"—District Game Protector G. W. Packard, Millersburg.

### Now She Knows

**ERIE COUNTY**—Deputy Lawrence Burdick was called out to pick up a road-killed deer. Arriving on the scene, he noticed the owner of a brand-new car looking over the severe damages. When he asked the lady why she didn't see the deer, as it was daytime and there were open fields on both sides of the road, she said she had seen it coming across the field but thought it would stop at the road.—District Game Protector W. Lugaila, Waterford.



### Triplets?

**CLARION COUNTY**—While chatting with Hunter Safety Instructor Andre from Chicora, he told me that he and two other hunters shot their bucks within 100 yards of each other, and each deer had one antler missing.—District Game Protector J. Bowers, Knox.



### What Else?

#### WESTMORELAND COUNTY—

—Many sportsmen understand that a certain percentage of the game must be harvested each year, but trying to explain this to a youngster who has been taught we should not kill anything can be pretty tough. After an hour of talking, I gave up and asked what he would do if it were left up to him. He replied, "Turn the whole world into a zoo."—District Game Protector S. E. Lockerman, Pittsburgh.



### Ask Dracula

#### CLEARFIELD COUNTY—

While getting ready to present a program on trapping to a local Cub Scout group recently, I overheard one "Cubbie" remark to another as they checked the dozen or so pelts I had arranged on a table, "Wonder which one is the werewolf?"—District Game Protector G. J. Zeidler, Rockton.

### What Gives?

**CAMBRIA COUNTY—**A few hunters still must shoot at other things than game. Two empty shotgun shells were observed on an old road and two food producing shrubs were ruined by the charges from the shotgun. — District Game Protector L. Mostoller, Johnstown.

### The Right Approach

**LYCOMING COUNTY—**At the annual banquet of the Lycoming County Soil and Water Conservation District, I had the privilege of presenting our wildlife Conservation Award to Richard Martin, of Cogan Station. Mr. Martin, a cooperator in our Farm Game Project, has used the assistance of the Soil Conservation Service in mapping a wildlife conservation plan for his farm. He is doing a fine job carrying out this plan by utilizing the trees and shrubs he receives from the Game Commission to create better food and cover conditions on his farm for wildlife. I wish we could encourage more individuals, sportsmen's groups, etc., to do as Mr. Martin.—Land Manager D. E. Watson, Williamsport.

### Traveling Through

**PIKE COUNTY—**An albino evening grosbeak visited my bird feeder briefly during January.—District Game Protector D. S. McPeck, Matamoras.

### Yellow Spots??

**HUNTINGDON COUNTY—**My wife noticed that the back door of my car was open and asked my oldest son, Brian, age 4, if he had been in the car. His reply was, "No, Mommy, that guy with the yellow spots took the scarecrows out and left the door open." The scarecrows were crow decoys and the guy with the "yellow spots" was Deputy Bill Walters wearing a camouflage suit. We had just returned from hunting crows.—District Game Protector E. N. Gallow, Alexandria.

### How True It Is!

**BRADFORD COUNTY**—Go hunting with your son and you won't have to go hunting after your son.—District Game Protector W. A. Bower, Troy.

### The Unanswerable Question

**FRANKLIN COUNTY**—An individual who was apprehended for killing a deer in closed season told me that while hunting woodchucks he saw a patch of brown moving through a thicket and shot. When he went over to see if he got what he shot at, he found he had killed a fawn deer. I asked him, "What if that patch of brown was a man instead of an animal?" He had no answer.—District Game Protector R. E. Schmuck, Greencastle.



### Out and Running

**WASHINGTON COUNTY**—A groundhog was observed by a fox hunter from the Westland area on January 29. The unusual thing about this was that the temperature was five degrees above zero and there was two inches of snow on the ground.—District Game Protector F. D. King, Washington.

### A Real Safe Zone!

**POTTER COUNTY**—While on patrol, I passed the farm of a Safety Zone cooperator. He had erected a sign of his own and placed it beside ours. While Safety Zone signs are intended to keep hunters from getting too close to occupied buildings, some hunters still disregard the safety of others. This landowner took added precautions by erecting the following sign: "Warning—Shots Fired Beyond This Point Will Be Returned." I wonder which sign had the most effect?—District Game Protector L. P. Heade, Galeton.

### Tragic Lesson

**MERCER COUNTY**—During the past hunting season, three young men sat in their car while their buddy went into a bar for another six-pack of beer. While waiting they decided to load their guns to shoot at ringnecks along the road after leaving the bar. In the process of trading guns, the shotgun in the front seat discharged, killing the 16-year-old boy in the back seat. Another good example that alcohol and gunpowder don't mix.—District Game Protector J. Badger, Mercer.

### Now We've Heard It All

**LANCASTER COUNTY**—Talk about irony, how's this? On the first day of the archery season I had no deer taken by archers. There were quite a few out, too. About 4:00 p.m. I did have a deer, a nice 4-point killed by a boat. Yes, you heard me right, a boat! It seems that a man trailering a boat was going down the hill from Conestoga to Safe Harbor when this buck jumped off the bank and hit the side of the boat, which killed it.—District Game Protector J. P. Eicholtz, Strasburg.

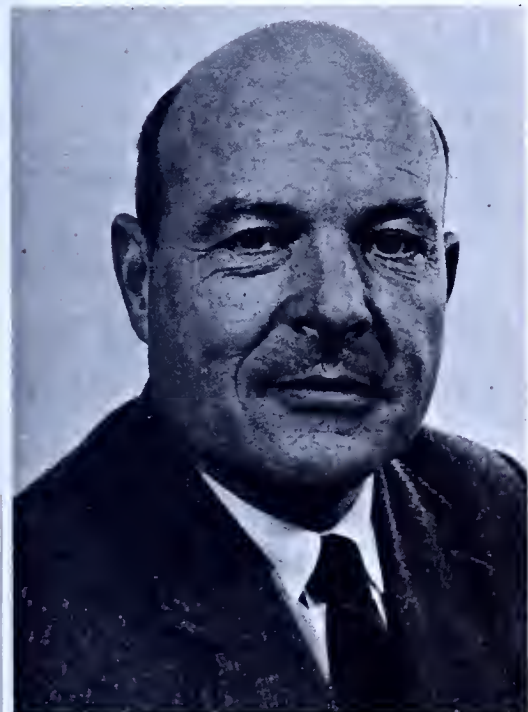




# CONSERVATION NEWS



By Ted Godshall



HARVEY A. ROBERTS



CARROLL R. KINLEY

## New Deputy Director, Land Management Chief

**T**HE Pennsylvania Game Commission on January 31 announced the creation of a second deputy executive director's position and the appointment of a new chief of the division of land management.

Harvey A. Roberts was named the new deputy executive director, and Carroll R. Kinley the new chief of the division of land management.

The Game Commission's expanded land program and increased demands upon the agency for services of all types resulted in the necessity for reorganization of administrative responsibilities to increase the Commission's

efficiency.

Robert S. Lichtenberger, who has been serving as the Commission's deputy executive director, will now have under his direction the divisions of administration, information and education and law enforcement.

Roberts will be responsible for the divisions of land management, research and propagation.

Roberts, a World War II Army veteran with service in the South Pacific, holds bachelor's and master's degrees in biological sciences and wildlife management from the University of Alaska. He is also a graduate of the

Ross Leffler School of Conservation, the Game Commission's training school.

The new deputy executive director is a native of Harrisburg and has been with the Game Commission since 1948, having served as an assistant research project leader, senior research technician, game biologist, acting chief of the research division, chief of the division of research from 1959 until 1970, and chief of the land management division from 1970 until the present.

Kinley, a Hummelstown native, is also a World War II Army veteran

with service in the South Pacific. He graduated from the Ross Leffler School of Conservation in 1947.

The new land management chief served as a district game protector in Allegheny County, a land management officer with headquarters in Somerset, Pittman-Robertson area leader for the Southwest and Southcentral Field Divisions of the Game Commission, and since 1965 has been a wildlife habitat manager in the Game Commission's Harrisburg office, responsible for State Game Lands planning and development throughout the Commonwealth.

## Record Deer Kill on State Highways

More white-tailed deer were killed on Pennsylvania's highways in 1971 than ever before, according to records of the Game Commission.

Game Commission personnel picked up 23,846 vehicle-killed whitetails in the state last year. This surpasses the old record of 22,610 deer killed on highways in 1967.

The 1971 figure includes only those animals removed by Game Commission personnel. It does not include deer which made their way into the woods and later succumbed, it does not include whitetails picked up by persons other than Game Commission personnel, nor does it include deer which were hit by vehicles and were not fatally injured.

In three counties more than 900 whitetails were killed by vehicles in 1971. Schuylkill led the list with 940, Monroe was second with 908 and Westmoreland was third with 907.

Eight deer were killed by vehicles in Philadelphia.

Total deer mortality in the state last year, other than those taken by hunters, came to 30,507, also an all-time record. The previous mark, 29,407, was established in 1967. The figure for 1970 was 29,259, of which 21,599 were road kills.

Increases were noted in several categories other than highway mortality. In 1971 918 whitetails were taken for damaging crops. The figure for 1970 was 842. Last year 4010 deer were killed illegally, more than the 3969 recorded in 1970.

There was a significant decrease in the number of deer killed by dogs last year, with 1065 recorded, compared with 1636 in 1970. Normally, about 500 deer are lost to dogs in a year.

Losses of whitetails in other categories in 1971 totaled 668, compared to 1213 in 1970.

## Tentative Opening Dates for Seasons

Tentative opening dates for the 1972 hunting seasons established by the Pennsylvania Game Commission are: archery deer season, Saturday, September 30; early small game season, Saturday, October 14; general small game season, Saturday, October 28; bear season, Monday, November 20.

The antlered deer season will open on Monday, November 27.



# DUCK HUNTERS' QUESTIONNAIRE

In a short time the Game Commission will be studying all available information which might be helpful in setting dates for this year's duck hunting season. Under the existing situation, the Federal government specifies the permissible opening and closing dates, tells each state how many days within this period may be open to hunting, and sets bag limits of the various species.

Each year the duck season is the cause of controversy among Pennsylvania hunters. Some prefer a straight season, others a split season. In some past years there was a penalty (loss of hunting days) for a split season, but last year there was no such penalty.

If you're a duck hunter, you doubtless have feelings on this subject. We therefore are asking you to fill out the short questionnaire below and mail it to the Executive Director, Pennsylvania Game Commission, P. O. Box 1567, Harrisburg, Pa. 17120, so that we may have the benefit of your experience. Thank you.

For the 1972 duck hunting season,  
I prefer a

- ☐ straight season  
☐ split season

Recommended opening date

-----

Recommended closing date

-----

If a split season, I prefer the opening period to be

- ☐ one week      ☐ two weeks  
☐ three weeks

I do most of my duck hunting

- ☐ early in the season  
☐ late in the season

I hunted duck on ☐ separate days  
last year.

I killed ☐ ducks last year.

I usually hunt by

- ☐ walking up and jump shooting  
☐ from blind with decoys  
☐ with sneak boat or other floating device.

I do most of my duck hunting in the  
county or counties of:

-----

-----

-----

Further comments may be included  
on a separate sheet.

Name -----

Address -----

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## Gadabouts

Some American pintail ducks fly to and from the Hawaiian Islands in one year, a total distance of approximately 4000 miles, while others fly to Palmyra Island and back, an additional 2000 miles.



**ROBERT T. LOVE**

Robert T. Love, of Levittown, Pa., has been named labor relations specialist for the Game Commission. In his new position, Love is responsible for collective bargaining contract interpretation and implementation. He will work out of the Harrisburg office of the Commission.

Love, who is married and has five children, holds a bachelor's degree in psychology from the University of Maryland and took graduate work at Temple University. He formerly was employed in various administrative positions with Philco Corp., Tempo Services Co., Jerrold Electronics Corp., and Crown Cork and Seal Corp., all in the Philadelphia area.

### **Moving?**

Be sure to send change of address to **GAME NEWS** Circulation Department, P. O. Box 1567, Harrisburg, Pa. 17120. Send both new and old addresses; allow six weeks for processing.

### **Editorial . . .**

*(Continued from Page 1)*

tional television show aired November 16, 1971), where the right to private ownership of handguns was argued, only 5261 viewers voted to ban such possession, while 25,960 voted to permit it. Furthermore, 30 percent of the persons who answered the LIFE questionnaire said they keep a gun at home for protection. LIFE called this a startling fact. I believe it's startling only to those who have lost contact with a large segment of the American citizenry—those who see what's happening in this country in regard to crime and see that it's impossible for any police agency, no matter how well trained or well intentioned, to be everywhere that crime might occur at every minute of the day and night. And so these people have faced the fact that they must be responsible in some measure for the safety of themselves and their families. This is an attitude that is going to grow in the near future. There is no alternative except the surrender of all individual rights to a dominant police state. Admittedly, this might control most of the crime problems that now plague us, but I doubt that many Americans are willing to pay that price.

I do agree that we need a new gun law. It should be a law that requires every citizen of normal physical and mental qualities to attain a reasonable degree of proficiency with firearms of common types—shotguns, rifles and handguns. He should have a general knowledge of how they work, know how to handle them safely, and be required to have at least one in his home. If this situation were to come about, most of our crime problem would soon disappear, along with the criminals. I know this is a drastic suggestion that will send some groups climbing the walls, but I'm fed up with the bleeding hearts whose only concern is for outlaws. I'm concerned about innocent victims.—*Bob Bell*



# P.F.S.C. Celebrates 40th Anniversary

By Leonard A. Green  
President, P.F.S.C.

**T**HE Pennsylvania Federation of Sportsmen's Clubs is celebrating its fortieth anniversary this year. This influential and dedicated sportsmen's group had its beginning on February 11, 1932, when five prominent Pennsylvania conservationists, Ross L. Lefler, John M. Phillips, Judge Grover C. Ladner, Colin Reed and John Youngman, met in the Pennsylvania Hotel in New York City, determined to create an organization which would help solve the conservation problems of Pennsylvania. Since that time, the P.F.S.C. has grown to a membership of well over 160,000, with 845 affiliated clubs in 59 of the state's 67 counties.

From the very first, the P.F.S.C. was concerned about the effects of pollution on the environment. The records of early meetings describe the problems created by mine acids and sewage draining into our waterways, and they give suggestions how sportsmen can work to solve these problems. Major changes in fish and game laws resulted from this early work by the Federation. The P.F.S.C. also was instrumental in having laws passed to require the backfilling of strip mines and the protection of streams, and in the years following the passage of the Bituminous Open Pit mining act in 1963 was largely responsible for the Anthracite Open Pit Mining Act, the Anti-Subsidence Act, amendments to Pennsylvania Clean Streams Act, the All Surface Mining Act, and the reorganization of state agencies under the Department of Environmental Resources.

The P.F.S.C. is the second largest affiliate of the National Wildlife Federation; it boasts the oldest state youth conservation camp in continuous operation

in the nation; it supplies scholarships annually for ten teachers to attend the Pennsylvania State University Teachers Conservation Workshop; it cooperates in putting on annual conservation essay and poster contests and is a co-sponsor of National Wildlife Week, proclaimed each March.

The P.F.S.C. went on record as favoring the creation of a hunter safety program in Pennsylvania and, in the years since the legislation was passed, has helped the Game Commission train tens of thousands of first-time hunters. Legislation that the P.F.S.C. now lists among its top priorities includes laws to clean up and protect the air, several land use bills, and an increase in resident hunting license fees.

Throughout the years, the P.F.S.C. has strongly opposed efforts to combine the Pennsylvania Fish and Game Commissions, stating, "The sportsmen support both these organizations through license fees, no taxpayers' monies are involved, and so long as the sportsmen want them separate and support them, that is the way it shall remain." They further point out that it was the license money of Pennsylvania sportsmen that purchased 1,100,000 acres of State Game Lands which are used and enjoyed by everyone interested in outdoor activities, and which also financed the acquisition and construction of numerous access areas for boating on our rivers and lakes, as well as the construction of some lakes themselves.

Looking back over the forty years of its existence, the Pennsylvania Federation of Sportsmen's Clubs can take pride in its accomplishments. It hopes and intends to do even more for the people of Pennsylvania in the years ahead.



**RAY H. HILL**, of North Versailles, proudly shows his 8-point buck—the first in 40 years of hunting for the 72-year-old sportsman. We hope you get another one this fall, Ray.

### GAME NEWS Binders Available

Binders which will hold a year's issues of **GAME NEWS** are available from the Pennsylvania Game Commission, P. O. Box 1567, Harrisburg, Pa. 17120, or from any of the six field division offices. The price is \$2 delivered.

## Deer Hunters Lauded on '71 Safety Record

Deer hunters in Pennsylvania had a fine safety record during 1971. The 51 accidents during the regular antlered and antlerless deer seasons were the lowest number reported since the 48 recorded in 1956.

This year there were five fatal deer season mishaps, a tragic number, but the lowest figure since 1964.

One year ago there were 82 deer season accidents, including eight fatalities. In 1969 there were 86 mishaps, including 14 fatalities.

The number of accidents is particularly surprising in light of the increased number of hunters afield. In 1956, hunting licenses were issued to 902,540 residents and 35,524 nonresidents. In 1964, licenses were issued to 868,972 residents and 47,380 nonresidents. It is estimated that in 1971 licenses were issued to 1,100,000 residents and 60,000 nonresidents.

Game Commission safety officials attribute the decreasing hunting accident rate to the increased use of fluorescent orange material and the mandatory hunter safety training program for all licensed hunters under the age of 16 years.

### Book Review . . .

## The American Sportsman Treasury

This is a beautiful book. Full color photos or artwork appear on 130 of its pages, and just looking at these pictures—battling bull elk in Idaho, a portfolio of Atlantic Flyway waterfowl, bonefish off Chub Key in the Bahamas, salmon and caribou in the Ungava, and many more—is enough to make any sportsman want to pack his gear and leave civilization behind forever. But there is much more than the photos. Almost a score of articles by outstanding writers such as Lee Wulff, Andy Russell, William G. Sheldon, George Bird Evans, Grits Gresham and Bob Hagel take you on the scene, tell you what to do, if the brown trout is your quarry, or the bighorn. There's also a selection of Carl Rungius' wonderful wildlife art, and a fascinating reprint from out of the past, "The Prairie Traveller—How to Survive the Way West in the 1850's." (*The American Sportsman Treasury*, ed. by Jerry Mason, Alfred A. Knopf, 201 East 50th Street, New York City, 10022, 1971. 252 pp., \$14.95.)



## A Long-Lived Cottontail

A 5½-year-old female cottontail rabbit was killed during the winter hunting season (1971-72) on the Aultman Run study area of the Conemaugh River Reservoir.

This rabbit was tagged on October 10, 1967, as a juvenile weighing 24 ounces. Growth rate studies indicate she was then about three months old. The cottontail was subsequently recaptured on March 3, 1968; October 7, 1968; March 4 and 6, 1969; October 6, 1969; and March 1, 1971. Recaptures occurred at the original trappingsite and at four other trappingsites. The longest known movement in these 5½ years was approximately 180 yards; this is a straight line measurement between the two trappingsites farthest apart. The maximum recorded weight attained was 50 ounces on October 6, 1969. From where the tag was recovered, it appears the rabbit was shot in this locality. Exact date of kill is not known, as the tag was obtained from a container at the parking lot.

In a review of the literature I cannot find any record of a wild cottontail attaining an age of 5½ years. Lord ("The Cottontail Rabbit in Illinois," Tech. Bull. No. 3, March, 1963) mentions a cottontail living as long as 9½ years in captivity. Records of four other captive cottontails older than five years are mentioned.—*John J. Kriz, Wildlife Biologist.*



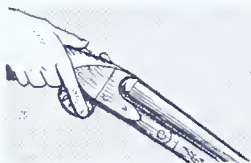
**STANLEY YEZEK, South Connellsville, with his bear, turkey and antlered deer, which qualified him for the Triple Trophy award given by the Game Commission to hunters who legally take these species in the same license year.**

### PHOTO QUIZ ANSWERS

1. Baltimore Oriole
2. Nighthawk
3. Bank Swallow
4. Redwing Blackbird
5. Flicker
6. Song Sparrow
7. Ring-necked Pheasant
8. Wood Duck

## Industrial Pollutant Lacking in Pheasants

Concentrations of polychlorinated biphenyls, an industrial pollutant which can be toxic to wildlife, are quite low in Pennsylvania pheasants. Tests conducted by the South Dakota Cooperative Wildlife Research Unit at South Dakota State University, in cooperation with the Pennsylvania Game Commission, indicate pheasants from the Keystone State are not in danger from the pollutant, commonly called PCB, and there does not appear to be any danger to humans eating these birds. In the study, livers were analyzed from pheasants taken in Lancaster and Washington Counties.



# HUNTER SAFETY EDUCATION



By John C. Behel  
PGC Hunter Safety Coordinator



*Photo by Michael P. Maugans*

**STUDENTS AT LOWER PAXTON TOWNSHIP police department listen attentively as Deputy Game Protector Joseph Branigan explains how a shotgun functions.**

## Hunter Safety Aided by Police

**M**ANY KINDS of calls for assistance are received at police headquarters across Pennsylvania, and a new one has been added since the passage of compulsory hunter safety legislation.

"When will the next hunter safety course be scheduled?" asks the voice of an interested young hunter. And the officer at the desk often has an answer, for many local police departments throughout Pennsylvania are assisting with hunter safety training, interested officers providing instruc-

tion in safe gun and bow handling for many first-time hunters each year.

Two of the latest police departments to assist Pennsylvania's Safety Program are the Lower Swatara Township Police and Lower Paxton Township Police in the Harrisburg area. Officers from these areas participated in the Pennsylvania Game Commission and National Rifle Association approved hunter safety instructor course, which was presented by Larry Mummert, a Deputy Game Protector and certified hunter safety instructor.



Officers Charles Alesky and Harold Easter, in cooperation with Sergeant Fred Reed, presented hunter safety classes prior to the 1971 hunting season. Patrolmen Alesky and Easter have also assisted in other hunter safety courses in the area on off duty time.

Lower Paxton police got right into action by presenting two courses of instruction while instructor training and certification was fresh in their mind. Because of limited classroom space and a large turnout of youngsters, two schedules of training were necessitated on their very first night. The minimum four-hour course was presented to 80 students by Deputy Game Protector and Administrative Aide Fredrick Wagner. Assisting with the instruction were Deputy Game Protectors Joseph P. Brannigan and John Harbold, and Corporal Frank Kolaric of the Lower Paxton Police Department.

These officers, experts on firearms, have added knowledge about unsafe, confiscated firearms, many of which are poorly constructed. In addition, they have considerable experience with promiscuous shooting by youngsters without supervision. With this background, developing proper attitudes toward the safe handling of guns by youngsters comes easy.

Officers of many police departments have taken hunter safety instructor training in order that they can present the course. One of the first police organizations to work with hunter safety was the Lock Haven Police Youths Hunter Safety School. Thousands of youngsters have been certified as safe gun handlers by this group of officers working on off-duty time. The course includes actual field handling of guns over obstacles and a simulated "shoot



**OFFICERS Charles Alesky and Harold Easter discuss firearms and their safe use with two youngsters in Lower Swatara Township, near Harrisburg.**

or don't shoot" series of targets, which teaches youngsters to absolutely identify a possible target before firing.

One police sergeant in western Pennsylvania reports that participation in hunter safety work has created a very favorable image of law enforcement responsibilities and a noticeable decrease in juvenile delinquency in his area. The program has brought about personal contact with youngsters which has led to some discussion of juvenile problems. Also, and most important, it gets them started on a proven deterrent for juvenile delinquency — outdoor hunting recreation. In another report from a local police group, they state, "We have been teaching hunter safety for ten years and have seen complaints about shooting in the borough and close to homes decrease greatly, entirely due to our contact. Our participation in hunter safety training has greatly helped to decrease juvenile delinquency."

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### Another Night Walker

Raccoons walk flatfooted, leaving tracks like small human footprints. They are adept climbers and spend daylight hours sleeping in trees, doing their foraging at night.



# BACKPACKING PRIMER

By Les Rountree

**I**N CASE YOU hadn't noticed, there's a ground swell of interest in backpacking going on in this country. All forms of camping are on the upswing but the idea of lugging all of your worldly possessions (on a temporary basis) on your back and spending two days to two weeks in the boonies is becoming the *in* thing to do. The vast primitive areas of the great American West are getting the big play in this department, but don't overlook Pennsylvania's back-in forest land. We've still got regions in our state where it's possible to walk 30 miles, or perhaps more, without seeing another human being . . . or much trace of one. The Susquehannock Trail in Potter County is one such area, and while it has already received much state and national recognition, it deserves mention again as it's one of the best hiking trails in the East. I mentioned some time back that Mr. and Mrs. R. were going to check this out and we did . . . last August. No, we didn't walk the entire

loop of 85 miles but we did hike a 30-mile section over a three-day period and quickly decided this summer would find us marching out the rest of the trail.

Being a Pennsylvanian, I was anxious to see some of this wilderness, but I was just as interested in trying out some new backpacking gear that I had been assembling for just this adventure. My wife and I had done some backpacking before but with rather primitive equipment. The newer trappings are considerably lighter and so we found them much more suitable for up and down hiking than my surplus G.I. gear.

We entered the trail at the northern gateway on top of Denton Hill and before 15 minutes went by we had lost the sounds of U. S. Route 6. No phones, no TV, no mailman. Our Labrador, Cleo, went along too. We thought that Cleo would hold up better on the trail than we did, but we didn't count on her side excursions.



She pooped out the first day and walked rather docilely beside us for the rest of the trip. She hadn't been hunting for at least six months and just wasn't in condition. There's a message here for you hunters who have a field dog. Don't expect him to be in top condition on the first day of the hunting season. Dogs need conditioning just as we humans do, and it takes at least two weeks' worth of one-hour sessions each day to get them ready for the coming season.

My pack weighed about 26 pounds and Ann's checked in at 20. I carried a long, four-compartment model from Gerry (Colorado Outdoor Sports Corp.), Boulder, Colo., and hers was a square model from L. L. Bean, of Freeport, Maine. Both are *waterproof*. This is an important bit of information to watch for when you are shopping for bags. The money you save by buying a *water resistant* pack will not keep you warm and cozy after a rainy day has soaked your sleeping bag and all your spare clothes.

Both of our packs were cut from ripstop nylon and were mounted on tubular aluminum frames. Frames usually come in three sizes. Your sporting goods dealer will measure your back and decide which frame will suit you best. Unloaded, the outfit weighs a little over three pounds. Shoulder harnesses are easily adjusted for different body conformations. We quickly discovered what all good backpackers know—it is far easier on your back to carry the heavier gear in the top of the pack and the lighter, bulkier stuff like sleeping bags in the bottom. Most of the time it is more comfortable to carry your pack with the shoulder harness snug. The exception is on a



**GAME BIRD FEATHERS** make an ideal subject for backpacking collectors, as they weigh next to nothing, can be carried in hair band or hat.

steep downhill grade, when a looser pack, riding partly on the hips, helps out on balance.

We exchanged packs several times the first day to compare the carrying qualities of the different styles and came to the conclusion that both are good. The Gerry pack will handle a bit more gear but the outside map pocket and the extra little cubby holes in the L. L. Bean job make it more convenient to carry some items—especially snacks.

Ann's pack contained all of our food and cooking utensils (a Boy Scout cooking kit, a lightweight frying pan, a G.I. can opener, plus silverware, knife, wood spoon and spatula), her personal kit, an emergency kit (first-aid items, fire starters, string, paper clips, candle, bug dope, sewing kit, etc.), sleeping bag and camera. My pack contained my sleeping bag, two one-man plastic tents, G.I. stove and fuel, two space blankets we used for ground cloths, two rain jackets, personal kit, extra clothes for both of





**WE THOUGHT OUR LAB** Cleo would hold up better on the trail than we did, but her side excursions pooped her out on the first day.

us, flashlight, camera, fly rod, reel and flies.

We stopped at the head of Splash Dam Hollow for our first lunch on the trail and a welcome foot soaking was enjoyed in the cool stream. That's one thing there is plenty of along the Susquehannock . . . water. I believe most of it is safe to drink and all of the larger brooks contain trout in case you enjoy catching and eating native brookies. Lunch consisted of a cheese spread on Melba toast and some prepared grape drink. Not too exciting but nourishing and surprisingly good tasting. Of course, all things, no matter how common, taste much better when you happen to be outdoors and hungry. Incidentally, we carried no fresh bread. Melba toast was used exclusively as a bread substitute and we didn't suffer one bit. In fact, I began

to like it. The toast weighs less than fresh bread and is much less bulky . . . a large advantage when you are carrying everything on your back.

As for the other food which I listed under the pack contents, a great effort was made to carry as light a load as possible. This had a dual purpose—to make it easier to carry, and to find out if some of the highly touted dehydrated and freeze dried food was as good as the manufacturers said it was. Honestly, some of it was very good. The freeze dried beefsteaks were considerably better than I thought they would be. You should be extremely careful to follow directions, though, since overcooking quickly ruins them. We found that the one-dish meals such as the freeze dried stews were easier to prepare and we enjoyed them more than separate meat, potatoes and vegetables. Ann carried a couple of bay leaves to enhance the flavor. The only “instant” food item that I developed a dislike for was the tomato juice. To me it tasted like a combination of paint thinner and swamp water and smelled just about as bad. A big improvement is needed there. Most of the powdered citrus juices are tasty and the instant cocoa is great.

#### **Grouse Feather**

My wife is an incurable collector and she began looking for things to pick up as soon as we had hit the trail. Rocks were immediately ruled out. Who wants to carry rocks on a hiking trip? A leaf or wildflower collection was difficult to carry. So, what to collect? The answer came at the first campsite. She found a grouse feather on the ground and stuck it in her headband. Before the three-day trip was over, she had picked up a dozen kinds of bird feathers, including turkey, bluejay, red-tailed hawk, barred owl and several others that we could not identify. Feathers are the perfect thing for backpackers to collect since they weigh almost nothing. Naturally, we collected pictures too . . . black



and white for this column and color slides for family enjoyment.

We camped the first night near Prouty Park and as we were both dead tired, didn't stir until eight o'clock the next morning. A pancake mix (just add water) with maple syrup carried in a Tupperware container went down just fine and we were ready to tackle one of the tougher parts of the trail. Fanton Hollow leads up from the Prouty Run and it should be called "pantin'" hollow because that's what we were doing when we hit the top. It's a steep climb and I was glad our hiking shoes had Vibram soles. They really bite into the soil and provide a nonslip bearing surface for rocks too. For hiking or hard hillside hunting, the Vibram sole is tough to beat.

### Wild Boy Run

Across the top of the mountain from Fanton Hollow, we passed into the head of Wild Boy Run (a most intriguing name; I'll tell the story connected with it sometime) and saw three beautiful bucks with heavy velvet on their antlers. Small wonder the deer were there. The forest had been clear-cut a few years back and hardwood browse was abundant.

One of the best things about backpacking is that it really makes you appreciate stopping. At the spring that feeds Wild Boy Run there is a beautiful shaded glen that almost forces you to pause and rest. We would have camped there had it been a little later in the day, but we hadn't made our projected 10 miles so we moved on after a foot soaking and a snack of dehydrated meat bar and raisins. They were tasty and very satisfying. The spot would have been even more delightful were it not for the remains of a dozen or so little campfires that were scattered about. Fires for everyone could have been built on the same small spot . . . but no, everyone had to build his own. It seems there is something about a man, like a bear, that



**A STURDY STICK** can be a big help on a walking jaunt, providing welcome support both climbing and descending Pennsylvania's hills.

forces him to put his sign out.

I have nothing against building fires while camping, but we tried to avoid it for safety reasons. The weather was hot and dry and I was glad we had elected to bring along a G.I. one-burner gas stove. It added a pound and a half to the pack and the gasoline another half pound, but they were worth the effort it took to carry them. An instant fire was always available for cooking and if we had been blessed with rain, the fuel problem would have been solved.

We decided to spend the second night along the East Fork and enjoy some of the trout fishing that stream is famous for. The water was extremely low and the trout were skittery, but we managed to coax four into striking our flies. They were cleaned, put into



**BACKPACKERS HAVE A wide selection of lightweight foods nowadays, and the Rountrees found them tasty as well as easy to prepare.**

a plastic jar and deposited in a nearby spring for cool keeping. The next morning we added two more and fried the half dozen for breakfast. All were brookies except for one brown that had taken on the coloration of his neighbors.

We terminated our Susquehannock adventure on the East Fork and hiked the final four miles on the road to Wharton. We were going to be met there by auto and as we had arrived an hour ahead of schedule we stopped in the Wharton Hotel for a bite of lunch. Homemade spaghetti was on the menu and we each ate an enormous plate of it. Now, dehydrated food is OK and some of it is very tasty indeed, but that spaghetti tasted extra good!

The conclusion? Well, Ann and I will be going back to this trail and others this coming summer. Parts of the famous Appalachian Trail near the

big population centers are being over-used, but we have some fine trails in the state that can take a lot more traffic. Check your official highway map for Baker Trail (in the west), Susquehannock Trail (northcentral), Black Forest Trail (northcentral), Loyalsock Trail (northeast), and Horse Shoe Trail (southeast). Many communities have active hiking clubs that provide a novice with a wealth of information about local trails and good companionship.

Backpacking is the purest form of camping. If you really want to see what the back-in country of your state is like, it's the only way to go. There is one thing I'll definitely include on next year's list of "musts"—a pair of soft leather slippers to wear around camp after a hard day's walk. Unless you are a real sourdough, the constant act of pickin' 'em up and layin' 'em down is tough on the feet, and it sure would be restful to slip on a pair of soft moccasins after a 10-mile jaunt. I'll willingly carry their few extra ounces during the day to have their comfort in the evening.

There is a great satisfaction connected with backpacking that cannot be explained to someone who has not tried it. Far more is involved than the usual trite phrases such as, "alone with nature" or "getting away from it all." Instead of fighting or competing with nature, backpacking requires that you work out a sort of two-part harmony. She sings the basic melody (as she always has) and the camper does his best to fill in the other parts. She supplies the water, the firewood, the scenery, the sunlight and the wildlife. How you use it, or abuse it, is up to you.

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### Nature's Way

Research by wildlife biologists shows that the bobwhite quail population undergoes an annual mortality rate of 75 to 80 percent, whether or not the birds are hunted.



# Ten Years of Team Shooting

**By Keith C. Schuyler**

*Photos From the Author*

**O**N APRIL 15-16, the 11th Annual Pennsylvania State Archery Association Indoor Team Championship will be held in the Farm Show Building at Harrisburg.

You may have read this announcement each year over the past ten with mixed emotions if you emoted at all over it. But, for those who have participated in the past, few will pass up the opportunity to attend if they can make it. Those who have regarded it without enthusiasm as just another tournament may be missing out on a real opportunity to enjoy this facet of archery.

It is only natural to have a team shoot in a sport where practically everyone present is a participant. Nothing will ever detract from the glory and thrill of individual accomplishment, but team participation in sports is as traditional as Christmas trees and Thanksgiving turkeys in America.

Probably the greatest attraction to such competition is the opportunity for the usual "also-shots" to share the winner's platform. In the tough competition on today's target line of archery, there are literally hundreds of excellent bowmen who are caught between the top and bottom shooters in their individual classes. Although they may be outshooting 95 percent of the archers in their club, they seldom have the opportunity to win.

For example, consider an archer who may shoot consistently in the high 400s—highly respectable scores—without really winning anything. At the same time, there are those who walk away from the tournaments with first-place medals who shoot a hundred



**ARCHERY TACKLE** is as varied as the scores, but the most important part of the total shooting machine is the person holding the bow.

points or more below such scores. There is nothing wrong with this, because those who win in the lower classes may soon climb into and be frozen in the same position as our high-400 shooters.

Reference here is to field shooting scores and summer tournaments, but the same situation applies in target tournaments, indoors or outside. There are always those who have neither the

time nor the particular desire to be top bow. Yet they are excellent archers in their own right, even though they may be destined to float in an area just below the winner's circle until they lose interest or drift into another activity which gives them more recognition or satisfaction.

Team shooting, whether conducted on a weekend basis in the local club or on a conference or regional level, provides an opportunity for "in-between" archers. Scores of a number of club members who never quite reach the top may in combination provide the top *team* score. The big one at Harrisburg is the ultimate in such competition.

### Double Opportunity

The 10th Annual Indoor Team Championship, held last April 24-25, provides a good foundation for our subject here. Combining this shoot in 1972 with the coming Third United States Indoor Championship, sponsored by the National Archery Association, provides a double opportunity for both individual and team shooters.

There were 431 registered for the shoot last year, and 409 archers actually participated. They represented 36 clubs across the state. This is approximately one-third of the total number of clubs in Pennsylvania, and such participation should be indicative of the interest created among competitive archers. Although most teams were obviously out to win, many enter each year just for the fun of it and to get the conditioning provided by shooting in a big tournament. In fact, a number of teams filled out their rosters with ladies just so that they could enter the competition. Under the rules, ladies may shoot on men's teams although the reverse arrangement is not permitted.

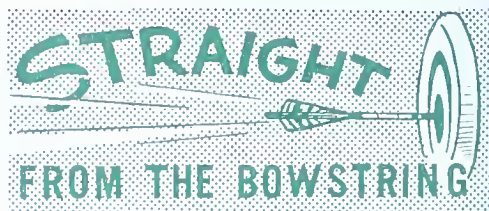
The spread between the top men's teams and the lowest is somewhat indicative of this desire to just be a part of the action. York archers set a new team record in the men's amateur

freestyle division with 3330 points. This was 56 points higher than the previous record established by Kennett Archery Club in 1968, and 849 points higher than the lowest team's score. In fact, each of the next eight teams in place beat the old record. It takes 800-plus scores for all team members to claim a round on the ladder of the top totals. Nevertheless, this didn't discourage a total of 64 teams from sharing the excitement and frustrations attendant to such a tournament.

There were 13 teams in the ladies' freestyle division, which was won by Big Chiques with a comfortable 3080. The York ladies came in second with 3027.

Seven men's barebow teams entered. South Mountain had an impressive 3030, beating out Ephrata by 84 points. Berwick Archery Club entered the only ladies' barebow team in the tournament. Several clubs that could not muster a ladies' freestyle team brought some of the girls along to shoot on the men's teams.

A precedent was set by Berwick Archery Club when the first bow hunters' team was entered in the 10-year history of the shoot. Although shooting hunting weight arrows in the Chicago Round might appear to be far afield from hunting conditions, the 20-yard distance is certainly practical practice. This is about the distance at which the average hunter should refine his shooting for big game in any event. The new adapters which permit easy exchange of broadheads with target heads on either aluminum or fiber glass shafts, permit practice on the target line with tackle identical to that used in big game hunting, ex-







**THE VAST AREA OF THE Farm Show Building in Harrisburg provides plenty of space for archers in the team shoots.**

cept for the heads themselves. The target heads for the tournament must be no less than 125 grains in the men's bow hunters' division. Ladies must use field heads of a minimum 100 grains in weight. We hope that this year will see many more bow hunter teams entered in the tournament. Bow hunters who gripe that competitive shooting has been taken away from them still have a class in which they can have fair competition.

David Jackson, who led the Kennett archery team to victory in the professional division, set a new personal individual record. His 860 was only four points from perfect. This meant that he only dropped two arrows out of the gold into the seven ring. The total team score, 3355, far surpassed the 3260 record established by the same club in 1969. It is noteworthy that, after the top pro score, the next six high team scores were made by amateur teams. No professional teams were

entered in the ladies' division.

It is no secret that many of the highest scores were registered by teams which shoot indoors throughout the winter. Although the PAA Round is popular at many indoor lanes, this is frequently varied with the Chicago Round which is used in the state amateur competition.

A rundown on the Chicago Round itself might be of help to those wishing to prepare themselves for the state shoot or any other event in which the round is utilized. Although this is not a championship round for the National Archery Association, it serves as the vehicle for establishing the Pennsylvania State Archery Association championship team. It consists of 96 arrows at 20 yards utilizing a 16-inch, five-ring target. Although the target is only 16 inches, colors are scored as in the American Round; nine for a gold, seven for the red, five for the blue, three for the black and a single point

for the white ring. Ends are composed of six arrows. Each archer shoots half an end at a time, alternating with his teammates. Each contestant has his own single target of four on the shooting butt, arranged in the form of a square with space between each tar-



**LADIES HAVE THEIR own class of competition and also may shoot on men's teams, although men are not permitted to shoot with the ladies' teams.**

get. Half of the round is shot at either the top or the bottom target. At half time the archer, who has been alternating ends with a companion, switches to the opposite target on either top or bottom. This ensures that each will have an equal opportunity, since there is a slight difference between shooting at the top or the bottom.

As many as eight archers may be on one team. However, only the four highest scorers are counted for the total team score. As mentioned, ladies may be part of a men's team, but the men may not shoot on a ladies' team. The standard 2½-minute time allowance is provided for each half end of three arrows.

With a heavy accent on sight shooting and barebow shooting in target archery, the point is sometimes missed that bow hunters may participate in any contest sponsored by the Pennsylvania State Archery Association. Fur-

thermore, like awards shall be provided in this class as for any other if there is competition. All official PSAA rounds shall be official rounds for the bow hunters' division. Further, all classification in the bow hunters' division shall be based on the field and hunters' rounds. Consequently, although the bow hunters' team from Berwick with which I shot was entered only as a token, it was meant to encourage competition in this important facet of target archery.

There is one requirement in team competition which must not be overlooked. Each member of the team must be a bona fide member of the club entering the team. Otherwise, there would be a temptation to gather in the best archers in any area and enter them as a unit in the competition.

It was the intention that this year's team shoot should be declared an open shoot to admit teams from across the country in an open class. This would not disturb the integrity of the Keystone State championship, as only Pennsylvanians will compete in this category. However, since the team shoot is now held on the same weekend as the United States Indoor Championship, it is hoped that clubs from other states will send a full team to compete in this tournament after the Nationals are completed on Saturday.

#### **Lots of Space**

The Farm Show Building is so large that it is possible to be in the team shoot on Saturday evening concurrent with the second flight of the national event. There is no reasonable limitation on the number of shooters who can participate at any one time, regardless of which tournament they enter. However, those who shoot in the National would have to schedule their time accordingly. It is possible to complete the National in the first flight in the afternoon and enter the Pennsylvania team shoot in the evening of the same day, but it would



seem advisable to schedule shooting on each of the two days if one is to operate at peak efficiency. The National must be completed on Saturday.

One thing appears fairly certain. Holding both shoots on the same weekend provides two big days in archery that are certain to draw more and more into competition. It is just one more reason why Pennsylvania has become the focal point for archery in the east as well as the activity hot spot for the entire nation.

Mechanicsburg Archery Club, with assistance of members from the greater Harrisburg area, did the work in setting up last year's contest. Actually, it was double duty for all those who helped, as the setup was made for both the National and the State shoots at the same time. Preparations made in the shooting hall for a mobile homes show which followed worked out nicely. The entire area, including posts, was draped in a soft yellow which made an ideal setting for the event.

Top credit goes to Mr. and Mrs. Bud Fowkes, Mr. and Mrs. Robert Sarver, Mr. and Mrs. Robert Cicula, William Knight, Maxine Hunter, William Holste and Mr. and Mrs. Clayton B. Shenk, who served as officials and



**BILL SUTLIFF**, former president of Berwick Archery Club, left, and **Roy Leiby**, center, Bloomsburg, shoot on the first bow hunter team ever entered in the annual event.

handled the registration. Possibly the performance of those who conduct these tournaments is nearly as amazing as some of the scores posted by the participants. Although the conduct of individual archers is normally top-grade, few can appreciate the time and volunteer effort expended by those who assume responsibility to insure that things will run smoothly and efficiently. Frequently, some excellent archers forego the opportunity to participate in the shooting to make it convenient for others to do so. Without these unpaid volunteers, organized archery would fall flat on its target face.

### Too Obscure

Aside from personal involvement in attempting to pinpoint the fact that bow hunters may compete in all Pennsylvania State Archery events, it would appear that this angle of archery is much too obscure. Unless and until officialdom separates barebow shooting from instinctive shooting, there remains only the bow hunter's class for those who wish to shoot devoid of any mechanical or extra visual assists.

In effect, all a bow hunter need do to participate in any of the PSAA sponsored events when he gets home from the hunt is to change the heads on his arrows.

Whether it has been lack of interest among archers or failure to promote the bow hunter's class by the Pennsylvania State Archery Association is immaterial at this point. In the past, although there is the hope here that this will be corrected, there has been no place on registration blanks for the bow hunter's class per se. Instead, there has just been a place to mark instinctive or, in some cases, only barebow. Bow hunters may register as such simply by marking either barebow or instinctive and adding the words "bow hunter's class."

If this seems a bit incongruous, let us take a quick look back to find out what happened to those who were in-

terested only in shooting a hunting bow. They created the field course which today provides one of the most popular tournament rounds. When sight shooting and the addition of hardware to the bows to assist shooting became popular, rules were changed to admit these refinements. Today the tail is wagging the dog. This is not to protest the refinements, but it is to urge recognition for those who prefer to shoot the bow and arrow as it was handed down from antiquity, utilizing only improvements in the basic bow and string itself and the materials of which they were con-

structed. The same thinking extends to arrows since certainly today's choice of aluminum, fiber glass or wood is a vast improvement over the single wooden selection available to all kinds and classes of archers not too many years ago.

In total, let the bow hunter stand up and be recognized or forever hold his peace. His type of archery in competitive shooting is slipping away from him. Only by his participation can he force retention of basic bow and arrow shooting as a sport sufficient unto itself for those who enjoy it in this manner.

---

## Book Review . . .

### German Pistols and Revolvers, 1871-1945

The reputation of German arms designers for quality and precision is based largely on products developed during the three-quarters of a century between the unification of the German states in 1871 and the defeat of the Third Reich in World War II. The outstanding German handguns of this period, plus those of several other European countries conquered by Germany, are here covered in extensive detail by a Master Gunner of the British Royal Military College of Science, after years of experience with these weapons. The legendary Lugers, Walthers and Mausers figure importantly, of course, but there is no slighting of less known makes such as the Dreyse, Kommer, Mann, Lignose and others. While coverage includes some historical background of the more important models, this book deals mainly with the mechanical aspects of these firearms—their markings, methods of disassembly, etc. Excellent photographs, including takedown views of many, are helpful for identification purposes, and appendices list manufacturers' codes for guns and ammunition, proof marks, cartridge data, and extracts, including line drawings, from important patent specifications. (*German Pistols and Revolvers, 1871-1945*, by Ian V. Hogg, Stackpole Books, Cameron and Kelker Streets, Harrisburg, Pa. 17105, 1972, 160 pp., \$12.95.)

### 40 Black Bears Killed on Roads

Forty black bears were killed on Pennsylvania highways by vehicles during 1971, according to reports from Game Commission field personnel. During the year 30 bears were killed illegally. Other known bruin losses brought the total out-of-season bear mortality to 77. In 1970 bear mortality totaled 60, while the figure for 1969 was 62.





REMINGTON M40XB-BR 222 wears a 20x Remington scope, left, while M700 22-250 has a 12x Leupold mounted. Adjustable chuck rests make precise shooting possible at long range.

*It's That Time of Year When We Should Give Some Thought to . . .*

# CHUCK SCOPES

By Don Lewis  
 Photos by Helen Lewis

**B**ILL AND I crouched low behind a decaying stake-and-rider fence, waiting patiently for a chuck to emerge from a hole 200 yards up the valley. It appeared to be a waste of time, with a good chance of getting drenched from the ominous rain clouds swirling above.

"We had better head for the ear, Bill," I remarked after studying the heavy clouds for a few seconds. "No chuck is worth the soaking we're going to get."

"Look, ol' buddy, working the second shift most of the times doesn't give me too many evenings to hunt. I've been after this chuck since spring, and if I don't get it tonight, chances

are I won't have another opportunity."

"Don't let me spoil your hunt, but if that chuck doesn't soon come out, it will be too dark to see with those clouds the way they are. They're the darkest rain clouds I've ever seen."

"A little rain won't hurt us, and I want to try this new scope even if you don't think much of it," Bill replied, paying no attention to what I said.

"I don't want to deprive you of shooting at this chuck, nor do I want to keep you from using your new scope. I'm only slightly suggesting that we are either going to get drowned or killed by lightning," I whipped back sarcastically. "I'm not criticizing your new scope. I only mentioned the



**BIG GAME RIFLE** carrying 2-7x Red-field scope accounted for this big chuck, but Lewis does not favor this type of scope for such shooting.

simple fact that I think a more expensive target type scope would have been better on your heavy barrel."

"Trouble with you, Lewis, is all you think of is scopes and more scopes. According to you, a fellow should have a different scope for every hour of the day. I shot chucks for years with nothing but old open sights, and I still think those were the best hunts I was ever on. Did I ever tell -----."

"Spare me the thrilling details," I cut in. "I've heard all about those good old days three dozen times. I didn't believe it the first time, and I don't believe it now. Open sights can't begin to come up to a scope. Why don't you admit you're just too tight to plunk down over a hundred bucks for a good target model? And by the way, if those were the wonderful days of yore, why did you keep borrowing my chuck rifle all the time?"

A disgusted look crossed Bill's face, and he gave me a tender, understand-

ing look—the kind a judge gets when he sentences a guy to hang.

"I only borrowed your outfit for a few shots over 200 yards. Everything else I took with open sights. The only reason I bought this scope is for the late evening shots at the long ranges."

"That's my very point," I exclaimed. "That tube filled with window glass you have there won't pick up a chuck if a dark cloud passes over. It won't transmit enough light under these conditions to see a bull moose at 200 yards, let alone the head of a chuck."

### All in Good Fun

Bill and I whacked away at each other as we normally did most of the time. It was all in good fun, but we did get across some points that we wouldn't have been able to normally.

Bill was a fair chuck hunter. Down through the years I hunted with him, he used a variety of small-caliber rifles. Most had been castoffs or ones he got in some outlandish trade. Bill, like a lot of shooters years ago, was very skeptical of the scope. I hammered away at him constantly about the right scope for chucks, but he never budged. Admittedly, most of the rifles he had used didn't warrant one, but when he acquired a used but fairly decent 220 Swift with a target barrel, he had no choice but to get a scope.

Unfortunately, I thought,  $\frac{3}{4}$ -inch scope mount rings came with the rifle. I advised Bill against getting a  $\frac{3}{4}$ -inch tube scope for that type of rifle, and I even offered to help him change the mounting setup, but since the rings were on the rifle, Bill made a deal on an inexpensive scope. To me, it detracted from the rifle instead of making it more effective.





While Bill watched the chuck holes up the valley, I kept an eye on the gathering storm. When the first crashes of thunder rolled over us, bringing a few scattered drops of rain, I started to get up.

"Hold it," Bill whispered. "That chuck is coming out."

"You better take a shot now while your powder is dry. By the looks of what's coming, we'll have to borrow a boat to pick up the chuck."

"Hold my binoculars while I attend to some unfinished business. You know, I missed this chuck twice with open sights," Bill revealed with a smile.

"I can't believe that. I'd always wished you could have been at Bunker Hill to win the Revolutionary War before it really got started. But now that I know you can miss such easy shots as chucks at 200 yards, your presence there would have been just another mouth for Washington to feed."

"Ah, shut up and watch. I might have missed with open sights, but tonight with the new scope will be a different story."

I watched for nearly a minute without hearing Bill fire. I lowered the glasses and looked at my hunting companion. Bill was wiping his right eye, then he stared through the scope, wiped his eye again, pulled his head back and forth and then disgustedly removed the rifle from his shooting stick.

"What's your problem?" I asked after Bill made a second attempt to fire. "Keep in mind, you don't have to look for horns," I ribbed.

"Give me that blunderbuss of yours," Bill said bitterly. "I can't see a bloomin' thing through this scope. It must of worked its ways out of focus."

"No doubt," I said casually, handing him my 22-250 heavy barrel with a 12X Lyman target scope on it. "I always hit my scope to stun it before I leave, just so it can't work its way out of focus."

Bill glared at me hard, but when a new burst of thunder rolled across the sky, he took a long aim and squeezed the trigger. We didn't need a boat, but before we got back to our rifles with the chuck, we were drenched from head to toe. It was only our long



**LEWIS CHECKS ZERO of M70 using Unertl Ultra Varmint scope. Other target models are Tasco 6-18x, Redfield "3200" and Unertl 2-inch.**

friendship and the fact that Bill stood over six feet that kept me from shoving him in a chuck hole.

I'm writing this column on chuck scopes in order to prevent the new or part-time chuck hunter from making the same mistake Bill made. With so many beginners turning to chuck hunting, there is a lot of confusion about the type of scope to buy. A lot of hunters are beginning to recognize the side benefits from summertime shooting, but too many are trying to compromise on a scope that can be used for all types of hunting.

A compromise can be worked out, but it would be much better to keep chuck hunting in a category by itself.

My contact with the public, along with my mail and phone calls, proves that a wide chasm exists between the realms of varmint scopes and big game hunting scopes. Any good scope is beneficial in shooting, but there are certain requisites in varmint hunting that demand special equipment. I've taken chucks with every type of scope, but I did better when I used scopes for long-range shooting.

Bill claimed he hunted back in the days when the scope was not too popular, and he referred to those times as the good old days. I can't agree. I've hunted with open sights and shot chucks up to 150 yards on occasion. I did have one Hornet with a fine receiver sight that would nail chucks consistently up to 125 yards. But after my first taste of the scope, I divorced myself from the open sight forever.



**BAUSCH & LOMB 6-24x with tapered reticle is a fine choice for varmint shooting if weight is no problem. Bushnell 7x35 binoculars are good selection for chuck hunters too.**

That might sound a bit one-sided, but 10 years of open sight shooting were enough for me. I was tired of straining my eyes.

The first scope I used extensively was on a fine Mossberg 22. I have no idea who made it, but it took nearly two boxes of ammo for me to get the thing sighted in. My late brother Dan always claimed it was designed by the humane society for it made the target look farther away.

### Poor But Useful

Most run of the mill scopes prior to the end of World War II were a sorry lot by today's standards, but they still were a distinct advantage over iron sights, and I added chucks to my list that couldn't have been taken without the scope.

Today the situation is different. The market is flooded with so many scopes, the hunter has a problem deciding which one to buy. The scopes I used then were inexpensive, but if I had had some extra money back then, I could have had an Unertl, Fecker, Lyman or Litschert. These were high quality scopes, but far beyond the reach of my wallet. The prices of today's scopes are just as bewildering as the dozens of makes and models. The hunter doesn't know if he should get an expensive straight power or one of the many bargain model variables.

I can honestly appreciate the predicament today's hunter is in. I've been through the mill so to speak, and I got stung a good many times. From a few years of hunting experience and actually testing a lot of scopes, I've reached the conclusion that the varmint scope is in a class by itself, and the regular hunting scope will not be a suitable substitute.

The fallacy in most hunters' thinking is that power is all that is needed, and this does make the variable power scope seem like the proper choice and also a good combination scope. To prove my point that the variable isn't the complete answer, the simple fact



that the big game hunter usually wants a heavy coarse reticle that will show plain and clear in the darkest woods is the exact opposite from what the varmint hunter needs. A close friend of mine installed a high quality Leupold 3-9X with a very fine crosswire and a small dot, but he was immediately disappointed when he discovered how difficult it was in the shadows to see the reticle. I had forewarned him that this was a dandy reticle setup for the varmint shooter but not a wise choice to be installed on a big game rifle.

### Most Practical Reticle

Most all variables today offer a reticle that has four posts coming in toward the center and then exceptionally thin wires in the center. To my way of thinking, this is the most practical reticle for the hunter who doesn't want to buy two scopes. I would also suggest this type of variable for the rifle that has the regular hunting scope bases on it. For instance, a 4-12X Redfield or 3-9X Weaver could be used effectively on a Remington M700, Ruger M77, Winchester M70 or many other makes of rifles in the 243, 6mm, and even Weatherby's 240 Magnum. These rifles can be used with good success on most light-boned animals in the big game class, and also they are excellent varmint outfits. I do feel, though, that the large objective lenses of the higher power variables do detract from the appearance of a light-barreled hunting rifle.

As far as visibility, light transmission, and general optical qualities go, there is no real difference between the two types of scopes. The only two factors that set the scopes apart are the metering systems and the objective lens sizes. Most regular hunting scopes have internal adjustments, and most target scopes have external adjustments in the rear mount, the Redfield "3200" being the only exception I know of. The reticle or a lens moves in the hunting scope, and my experi-



**ALL THESE TARGET** scopes work well for chucks because they have precise adjustments, excellent optics and adequate magnification.

ence has been that the adjustinents are not always precise and have a tendency to jump the bullet erratically. This is especially noticeable when turning the metering wheels to extremes. Strange as it may seem, I've seen inexpensive scopes that did meter correctly from one extreme to the other, and I've tested some high priced jobs that just wouldn't cooperate.

This condition really can't exist in a target scope that has an external metering set up. Each time the adjusting wheel is turned, the scope actually moves, and the bullet will track evenly and precisely. On a very fine varmint rifle this is a must. I have a Remington 40XB-BR 222 that will cut one-holers most of the time. Sometimes, just for the heck of it, I will move the scope two clicks each shot just to watch the bullet make a path across the target.

The internally - adjusted Redfield "3200" also has precise adjustments.

These are on a par with the best externally-adjusted models.

One thing that I'm fussy about when I mount a target scope on a fine rifle is the distance between the bases. I've explained in other columns that the normal setup between bases is 7.2 inches to get a bullet movement of  $\frac{1}{4}$  inch at 100 yards. There is nothing wrong with this, but I normally want my bases farther apart — up to 10 inches. This permits me to make adjustments of less than  $\frac{1}{4}$  inch.

### **What Magnification?**

The power factor is greatly misunderstood in all scopes. To keep from getting involved in a long technical discussion, I'll just say that the big game hunter in Pennsylvania can be very well satisfied with powers under 6X, and the varmint hunter should start at 6X and go to a maximum of about 12X. I've said many times that a shot can't be placed any better than the shooter can see where he is aiming. The size of big game at distances normally under 200 yards does not require the higher powers. The fact that chuck shots often run out to 400 yards, along with trying to hold on a very small target, makes the higher powers a necessity.

One reason I'm a great advocate

of the 10X and 12X scopes is that the hunter automatically makes a tighter hold. The high power of the scope makes it very obvious to the shooter just how much wobbling around he's doing. Don't think that the shooter does less wobbling with the lower powers. The wobbling is identical, but the higher magnification shows it more plainly, so more effort is made to correct it. However, there is little need to go beyond 12X, as this gives all the resolving power needed for precise aim at small targets even up to a quarter-mile or so. I have used 20X and 24X on occasion, but these extreme powers often lead to problems you hadn't thought of when browsing through a catalog. They transmit less light, have smaller fields of view, and, perhaps most importantly, have trouble with mirage—heat waves—which the lower powers don't. They are excellent on a benchrest under controlled conditions, though even there some of these problems exist, but I've found them generally impractical in the field.

If chuck hunting is going to be on your agenda this summer, give some thought to what I've learned from trial and error. Not everyone is as fortunate as my friend, Bill, who could borrow the right scope when his failed. . . .

### ***Slow Starters***

Golden eagles do not mature until the fourth year.

## **Looking Backward . . .**

"It may be stated . . . that very little is known of the process used by the Indians to prepare bear and deer skins for shoes and clothing. . . . Their skins are tanned with the brains of deer which make them very soft; some leave the fur upon the skin, and such fur shoes are remarkably light and easy. The Buffalo robes sold by our furriers as tanned by the Indians are softer than those that are tanned by civilized people."

W. H. Egle, "History of Dauphin County," p. 5, Evarts & Peck, Phila., 1883.



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(SYMBOL--AL)**

**Grand total ARCHERY Harvest..... 2,769**

Grand total HIGHWAY Mortality.... 23,845



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#### COVER PHOTO BY JERRY WUNZ

Each year, more and more Pennsylvania sportsmen come under the spell of spring gobbler hunting. They find a satisfaction in this season that is different than that resulting from any other hunting. Mornings may still be frosty—particularly at the higher elevations of the state—or they may be warm and humid, with mosquitoes a torment, but no matter what the inconveniences, they are minor compared to the thrills. No other sound in our outdoors can make a hunter's heart start slamming against his ribs the way the sudden gobble of a turkey does when it breaks the stillness of a May dawn. If you haven't yet experienced it, get out there this season.

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## **More on the License Situation**

**W**E'VE HAD MORE MAIL on the March editorial, "Let's Face Facts," which dealt with the proposed increase for resident hunting licenses, than on anything else since I've been here. Normally, all letters are answered individually, but I don't think that will be possible with these. I just don't have the time. Therefore, I want to take a moment here to thank everyone who wrote, regardless of the opinion expressed. We appreciate knowing how you feel and why you feel that way. As a matter of interest I can tell you that, by actual count, those favoring the increase outnumbered those opposing it by almost exactly two to one. In other words, 67 percent of the persons writing us advocated increasing the license cost to \$8.20 (and a surprising number recommended a \$10.20 fee).

Those opposing the increase almost always gave reasons for their stand or asked questions which indicated a lack of familiarity with the overall situation. As space permits, I want to try to answer those questions, hoping this will help you understand our viewpoint.

The biggest area of contention was in the resident-nonresident relationship. Some Pennsylvanians were angered by what they viewed as the visitors' "threat" to stay away until a more equitable ratio between the two license fees was established. (It had been 5:1, is now 8:1.) They argued that Pennsylvania gives nonresidents more for their money than most states and that anyone who doesn't agree with this should try going somewhere else. This group tends to feel we have too many nonresident hunters now and in general believes that Pennsylvania should be kept for Pennsylvanians—"the persons who pay taxes and otherwise contribute the year round toward this state's welfare, rather than those who come for a week or so and then go home."

It's hard to oppose such arguments logically, for they are based on emotions rather than facts. Anyone who simply doesn't like nonresidents (who often, incidentally, are former Pennsylvanians who still regard this state as home) won't have his mind changed by anything I can say. But my personal feeling is that anyone who satisfies the legal requirements for hunting in Pennsylvania and acts in a sportsmanlike manner should be welcome here, no matter where he lives. The concept that Pennsylvania should be completely reserved for Pennsylvanians rubs me wrong. Carried to its conclusion, one would have to say that Potter County should be reserved for its full-time residents, a township for its own people, etc. What kind of sportsmanship is this? And if *we* can't act as sportsmen, who can? How can we stand up to the growing mob of anti-hunters, for instance, and tell them what great guys we are, and then turn around and tell another hunter from Ohio or Jersey or Maryland, say, that we don't want him here? These are our kind of people, no matter what state they live in; they're far closer to us in philosophy and actions than many residents of this state, and we had darn well better remember that.

Admittedly, the matter of license fees is a complicated one. Everyone agrees that nonresidents should pay more. The question is, how much? This has been studied by many persons and organizations, and one of the most respected opinions has come from the Wildlife Management Institute (709 Wire Bldg., Washington, D. C. 20005), published in 1971 as "Report to the Western Association of State Game and Fish Commissioners on Nonresident

*(Continued on Page 34)*







# *When the Turkeys Came Back to Lonnigan Hill*

By Michael E. Jones

"YOU MUST BE kidding," Dave said with a laugh. "There hasn't been a turkey up on Lonnigan since before it was logged off."

"They're there now. I'll swear on any Bible that I saw them," I repeated.

I knew Dave thought I was pulling his leg, but not an hour had passed since I stood face to face with an old tom on the ridge in back of my house. Lonnigan Hill has been my favorite hunting grounds since I was old enough to carry a gun in the woods. Some of the finest deer in the county have come off that hill, but everyone knew there weren't any turkeys up there. That's why Dave was so skeptical of my new discovery.

Susquehanna County has never been known for its turkey hunting. In fact, 20 years ago, a fellow would have been hard pressed to even find a single track. The logging operations had cut down many large tracts of woodlands and dairy farming had patchworked the county with pastures. Very little turkey habitat existed and extensive hunting had narrowed the population.

But some changes have been made. The logged-off areas have reforested themselves, and many old pastures reverted to woodlands as dairy farming declined in importance. Yearly stocking programs by the Game Commission have replenished the county with enough turkeys so that it is no longer a rarity to see these big birds. The turkeys themselves have seemingly made a change. Instead of remaining in the "big woods" which they normally prefer, they have adapted to the border areas and, much like our deer herd, they seem to thrive in the reverting farmland. It seems to me that we have very few woodlots that don't

harbor an occasional flock, since the turkeys roam from hill to hill.

Although Lonnigan fits the description of reverting farmland, I hadn't considered that it might hold a flock of turkeys. I had taken my eight-month-old beagle, Buffy, for a walk up on the mountain on a cool Saturday morning in late February. As we rounded the knob at the top of the ridge, Buffy started to make game. Because we were in large, open woods, I immediately feared she was on a deer track. I hurried to catch up with her so that I could leash her, but she got into a clump of thick scrub oak before I reached her.

## **I Heard Buffy Squeal**

Just before I came to the edge of the oaks, I heard Buffy squeal. I froze in my tracks, trying to determine where she was headed. Suddenly, out of the brush, a huge tom turkey sprinted directly toward me. The gobbler stopped, not six feet from me, and we stood eye to eye for a long moment. Then, from the scrub oaks, five more turkeys appeared on the scene, Buffy right behind them. As the turkeys bolted past me, I managed to get a hold on Buffy's collar and slip the leash into place, despite her protests.

It was this wild tale which Dave hadn't quite believed. However, after a little urging he agreed to accompany me on a search for the mysterious turkeys. Both Dave and I had hunted spring gobblers in the previous two years and we were anxiously awaiting the opening of the '71 season. This would be a good way to return to the woods after the midwinter layoff.

The following Saturday morning, we set out to find the flock. We climbed

to the knob where the stand of scrub oaks lay, moving as silently as possible. As we scanned the area it was clear no birds were there. However, further examination showed they had been there recently. Large plots of ground had been scratched and turned up, characteristic evidence of feeding turkeys, and scattered feathers gave evidence that this was a preening station.

"I never thought I'd see this," Dave muttered as he scratched his head in amazement.

"I know, but here it is, turkey hunting in our backyard."

"I don't know, I still think we'd have a better chance up on the Game Lands."

"You can run all over the Game Lands if you want to, but with a turkey the size of that tom running up here, this is where I'm going to be on the first day."

The next weeks were spent in anticipation of the spring hunt. Dave did some scouting on the Game Lands and came up with some good reports.

**I LOWERED MY GUN and started running after the turkey. After a little bit, it was evident that I wasn't gaining. . . .**



He planned to hunt the top of Smokey Ridge, where he said the signs were particularly encouraging. It was the same ridge where he had bagged his first turkey a year earlier.

I still stuck to my plan of hunting Lonnigan. I had spotted the flock two more times in scouting trips. Three hens and two younger gobblers had joined the group, enlarging the flock to 11. My doubts began to grow, however, when I realized that I had never been in shotgun range of the magnificent tom. He always managed to slip out of range before I could see him, except for our first meeting.

### Strategy Talk

When the eve of the first day rolled around, Dave suggested that I drop in at his house to talk over strategy. Over coffee, he told me he planned to work the north end of the ridge, near the Susquehanna River. He was well practiced with the call that I had given him for Christmas two years earlier. I planned to stillhunt the ravine for the first hours, then stalk the scrub oak clump, as I wasn't too good with a call.

"You still have time to change your plans and hunt with me," Dave offered.

"Well, like you always say, I guess I'm half crazy, but it's kind of a personal thing between that big tom and me."

"Okay, you're the boss, but come on over tomorrow at noon and I'll show you what a real turkey looks like."

I knew Dave's taunt was merely a friendly jest, so I answered, "Maybe I'll see one up close before that. I'll see you tomorrow."

Breakfast came early the next morning. Many hunters have voracious appetites in these early hours, but the most I can ever find room for is an egg, toast, and coffee. After the usual last minute check of equipment, I walked out the back door and into my chosen woods. It was still five minutes before dawn when I reached the bot-



tom of the ravine. I stopped and thought about the day's hunt. The ravine angled up the ridge toward the back side of the knob where the scrub oaks grew. Beechnuts on either side of the ravine provided excellent feed, so I felt if I covered the next mile very slowly, I would have a good chance to catch the turkeys feeding. If I didn't see a gobbler during this time, I could try to surprise them at the preening station in the scrub oaks.

At last there was enough light to shoot. I loaded my Remington Model 1100 with No. 2 Magnums. Its 30-inch full choke duck barrel was ideal for this type of hunting. As I eased along the ravine, I noticed that the forest was coming to life. Chipmunks played on every stone or fallen log and a family of grouse picked among the leftover beechnuts. Suddenly a movement on my left caught my attention. I slowly turned towards the flicker and strained to see what it was. Then, to my pleasure, a lone deer moved to the small creek and took a drink. It was obviously unaware of my presence, but it retreated along the path it had entered. It was still too early in the year to pick out any growth between its ears, but I labeled it a buck because of its singular presence.

### Took a Breather

I took a breather at the end of the ravine. It was a warm, moist morning and I had already sweated through my camouflaged sweat shirt. I hadn't seen any sign of the old gobbler's flock yet, but my best chance still lay ahead in the scrub oaks.

I approached the thicket from the same direction as I had when I first met the birds. I had worked about 10 yards into the smaller trees when I heard a familiar noise. Somewhere on my right turkeys were gently clucking. I eased to one of the large trees and hid behind it. Soon, three turkeys walked single file toward me. They stopped to examine a fallen log 15 yards away and I could see that one



**AS I PULLED INTO Dave's driveway that afternoon, I could see he had been successful too. He displayed a nice turkey and a large smile.**

was a young gobbler. I could have filled my tag right there, but I felt sure that big old tom wouldn't be far away from these three. Suddenly, more turkeys came along the path. Two . . . six . . . seven birds joined the others. Among them was a medium-size gobbler, but the big one wasn't there. My eyes searched the woods from which the turkeys had come, but I could see no others.

Then I got an uncanny feeling that there was something to my left. Turning slowly . . . ever so slowly . . . I gazed out of the corners of my eyes directly into the stare of the old tom turkey. He stood only about five yards from me.

The big gobbler immediately burst into a run. I fired hurriedly at 10 yards but he never broke stride. I'd shot too quickly. I deliberately took my time with the second shot and was rewarded with a puff of feathers. But the gobbler was still half-hopping, half-flying away. I lowered my gun and started running after him. It was

soon evident that I wasn't gaining ground. I stopped and leveled my gun for the third time. He was 30 yards distant when I stopped, at about 40 when I pressed the trigger. At the shot he folded into a heap and never made a move as I sprinted up to him. The big gobbler was mine!

It took quite awhile to control my shaking hand before I could write out a tag. I was so excited that the walk home was made in record time, even with my load.

As I pulled into Dave's driveway that afternoon, I could see he had been successful too. He stood in his garage doorway with a somewhat small turkey but a large smile.

How did you make out?" he called as I got out of the car.

"Come see for yourself!" I walked back and opened the trunk as he arrived at my side.

When he looked at my turkey he exclaimed, "You old dog, I never figured you'd ever see him, much less shoot him. He's twice the size of mine!"

Dave was nearly right. We weighed them on his scales, and mine weighed a little less than twice his 8 lb. 13 oz. bird. At 16 lbs. 10 ozs., my gobbler was the largest wild turkey I have ever seen.

So now, thanks to the Game Commission, I've got turkey hunting right in my backyard. Although my gobbler will never make the record books, I'll never forget the year the turkeys came back to Lonnigan Hill.

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## Archers Report Taking 2769 Deer

Archers had their fourth best year on record during the 1971-72 seasons as they reported harvesting 2769 deer in Pennsylvania during the regular and extended seasons for bowmen. The top archery figure of 3251 whitetails reported taken was established in 1967-68. Last year, archers took 2998 deer in Pennsylvania. The figures do not include archers who got their deer during the gunning seasons.

Reports filed by bowmen showed that 1080 antlered deer were taken during the most recent seasons. These included 653 with three or more points and 427 spike bucks. The antlerless harvest of 1689 included 1324 females and 365 males. Overall, archers took 1445 males and 1324 females.

Potter County, second in archery success a year ago and first two years ago, returned to the top in reported harvest during the 1971-72 seasons. Bowmen tagged 232 whitetails there.

Forest County, first for bowbenders a year ago, slipped to second with 145. Sullivan County was third with 127, while Bradford and Lycoming tied for fourth place with 113 each.

Leading antlered deer producing counties for archers were Potter, 75; Sullivan, 48; Forest, 46; Lycoming, 40; and Bradford, 34. Top antlerless counties for bowmen were Potter, 157; Forest, 99; Bradford and Sullivan, with 79 each; and Lycoming, 73.

## Leans That Way

No one knows why, but the wrybill plover is the only bird with a disjointed beak, and it is always bent to the right.





*The Living World of . . .*

## **The Cattail Marsh**

**By Tom Fegely**

**A**BOVE the treetops, along the edge of the forest, appeared a great-winged bird. Circling the ring of open water, it lowered its stilted legs and with a rapid beating of wings settled gracefully into the shallows. Standing motionless amid the cattails and bulrushes, the statuesque blue-gray bird peered downward. Suddenly, like a loosed arrow, the long, spearlike beak shot forth and seized an unwary frog. Raising its bill toward the sky, the frog was skillfully flipped and swallowed head first. A great blue heron, northbound on its spring migration, had stopped off at the cattail marsh.

At one time the marsh had been a pond. Over a million years ago great

sheets of ice covered portions of Pennsylvania. As these glaciers advanced they brought with them an assortment of rocks and soils, all the while carving new landforms and gouging out ridges and depressions. With the coming of a warmer climate the glaciers melted and a variety of ponds and lakes remained. As years passed, soil from the surrounding hills eroded and, along with the remains of dead plants and animals, filled the lakes and ponds.

In the shallow water along the shore, grasses and sedges appeared. Before long cattails and bulrushes took root in the mud. In deeper pools water lilies, adapted for a floating existence, began to flower and grow



Luther Goldman, USFW Service

**RASPING CALLS** and flashes of scarlet announce the presence of male redwing blackbirds and the arrival of spring.

along with various types of weeds. A cattail marsh had been born.

Each year tremendous numbers of seeds are produced in each of the cattail's brown, cigar-shaped heads. Blown by the wind, they spread rapidly and soon crowd the shallow waters of the dead lake. The thick cover of the double-edged cattail leaves provides protection from the hot sun for frogs, insects, birds and fish.

In the early spring, great flocks of redwings perch on the cattail stems, flashing their bright red epaulets as they announce their presence with calls of *conk-er-ee, conk-er-ee*. Upon the arrival of the females, territories are established, mates are chosen and a nest is built of grass and reeds. Suspended from the cattail stems only inches above the water, scores of young redwings hatch and are fed insects caught by the parents.

On misty March mornings, faint barking sounds echo across the marshland. Several wedges of Canada geese appear along with the first rays of the sun, shifting and calling. A few stragglers circle low over the amber water and splash down in the marsh. Beating their wings and sending streams of water up over themselves, they seem happy to rest after the grueling night's flight.

As the skies brighten in the morning, mixed flocks of mallards, pintails and black ducks are seen dabbling among the arrowheads, dipping for the tasty tubers of this plant known as "duck potatoes." Others patter among the cattails and in the muskrat sloughs, scooping up the tiny duckweed plants floating atop the water like miniature lily pads.

A solitary coot, pumping his head as if to give added momentum, bobs in and out of the spatterdock, pausing occasionally to step atop one of the shield-like leaves. The feet of the coot are not webbed like that of the duck. Instead the toes have broad pads which equip the bird for its aquatic life. Related to the clapper rail, it feeds on surface food such as algae and bulrushes.

#### Wood Ducks

To many, the wood duck is the most beautiful of the waterfowl. Numerous marshes have wood or aluminum nesting boxes for use by the woody. Trial of both types of boxes at the Pymatuning Goose Management Area has shown the aluminum type to be best. As compared to the wooden ones, they are raccoon-proof and cooler, due to the design and reflecting power of the metal. The small opening is sufficient for the female to enter, although she often gets banged up in the process of flying through the opening at almost full speed. Raccoon predation may account for as much as a 90 percent loss to nesting woodies using the wooden boxes, despite the placement of these boxes in flooded areas. Many families of wood ducks are raised in hollow trees, requiring the young to jump a considerable distance to the forest floor before making their perilous journey to open water.

Other marshland birdlife includes sanderlings, killdeer, greater and lesser yellowlegs, several species of herons and other shore birds and long-legged waders. Attracted by the crustaceans, worms, insects and mollusks



that live along the muddy shore, their long bills and legs adapt them perfectly for their probing ways.

In deeper waters canvasbacks, red-heads and hooded mergansers are commonly seen. These are the diving ducks. Having shorter legs placed farther to the rear than those of the dabbling ducks, they appear awkward on land but serve well for swimming underwater. Aquatic insects and vegetation as well as small fish comprise their diet.

One of the most inconspicuous residents of the marshland is the American bittern. Often called the "stake driver" or "bog pumper," its call has been likened to the sound of a stake being driven into the ground and the un-birdlike noise of a rusty pump. Bitterns breed over an extensive region, including Pennsylvania. The bittern's streaked breast and its peculiar habit of pointing its bill toward the sky camouflage it as it hides among the grasses and reeds. It will even sway gently with the grasses as they are moved by the wind. The pointed bills of bitterns were once used by Indians as arrowheads.

As flaming pastels and chilling breezes of fall come to the cattail marsh, so do the hunters with their dogs. A muddy shoreline, crisscrossed with bootprints and littered with shotgun shells, attest to the variety of waterbirds present. Many a wing-shooter has spent a box of shells with only a single rail or gallinule to show for the day's efforts. Few duck hunters fortunate enough to hunt a wetland area will question the value of their \$3 duck stamp.

### Marshland Mammals

Toward evening, muskrats leave their lodges which dot the open waters. Arrowheads, pondweeds, bulrushes, and an occasional mussel make up much of their diet. However their favorite seems to be the cattails. Serving as a natural balance for the cattail population, the muskrats devour entire plants, preventing a root

mat from forming and closing up the small pools of open water in which the waterfowl feed and frolic. Each winter the muskrat population is in turn kept in balance by trappers. Few can forget the chilling December mornings and the thrill of a good night's catch in the frozen marsh. Pleasant also are the memories of the extra cash for Christmas gifts.

### Skunks and Raccoons

Visitors from the nearby forest or woodlot also find the marsh to their liking. Moonlit journeys of skunks and raccoons may mean destruction to a clutch of mallard or coot eggs. Usually though, the masked bandit patrols the shoreline in search of mussels, crayfish, frogs or anything else his probing hands can uncover.

In the morning a mosaic pattern of tracks appears on the muddy shoreline. Muskrat, mink, fox and raccoon tracks intermingle with those of a lone deer that came to drink. Imprints of the long-legged wading birds and the webbed-foot inhabitants complete the shoreline register.

Choirs of spring peepers and baritone bullfrogs announce the coming of spring to the marsh. Dragonflies

**OVER 13 MILLION muskrat pelts are harvested annually in the U. S.**

*V. B. Scheffer, USFW Service*



and damselflies dance among the reeds and perch atop the cattail stems. Mayflies, stoneflies, and caddis flies emerge from their aquatic homes, providing a vital link in the marshland food chain.

Salamanders and frogs lay tremendous numbers of eggs in the shallow water to insure the survival of their species. Later those that avoid the numerous predators will hatch into tadpoles and a fortunate few will become adults.

The small life-forms of the marsh, prolific in their productivity, form the basic foods for the larger residents. Without the insects, mollusks, crustaceans and amphibians, many marshland birds and mammals could not exist.

As the cattail produces thousands of seeds, only a small portion of which germinate and grow, so do the other marshland plants. The sedges, plants with triangular stems, grow in all wetlands. Floating on the water are water lilies and duckweeds. One of the tiniest of all flowering plants, the duckweed is a favorite food of many waterfowl. Another valuable wildlife food is arrowhead, named for the shape of its leaves. Pulling an entire plant out of the water will disclose several bulbs dangling on the stems.

**THE AMERICAN BITTERN**, a relative of the herons, nests in many Pennsylvania marshes.

USDA Photo



These are the "duck potatoes," relished by waterfowl and muskrats alike.

The bulrushes are tall, round-stemmed plants that provide cover as well as seeds for waterfowl.

Of all the marshland plants, however, the cattail is probably the best known and most easily identified. As mentioned, waterfowl use the cattail roots as food, and muskrats rely heavily on the entire cattail plant for food, as well as building materials for their lodges.

The least obvious plants of the marsh are the microscopic algae. Their tendency to live in groups often causes them to build up in great masses, coloring the water a pea-soup green. Some are free-floating while others are attached to rocks, sand and underwater vegetation. The chief role of the algae in the marsh is to provide food for the small organisms which in turn become food for the larger birds and mammals. Algae form the primary link in the great energy cycle between the sun and the marshland inhabitants.

### Other Types of Wetlands

Many people speak of all wetlands—bogs, swamps and marshes—as being one and the same. Actually each possesses identifying features and characteristic forms of life.

A bog usually develops in a relatively deep lake with poor drainage. Plant life includes floating sedge or sphagnum mats and often coniferous trees. Generally the mat is sufficiently dense to support the weight of man. Beneath the highly acid waters of a bog lie extensive peat deposits.

A marsh, as has been described, is a "treeless" form of wetland. Sedges and grasses form the main vegetation.

As a marsh ages, it eventually is filled by silt and the remains of dead organisms. Soon little thickets of trees and shrubs move in and a wooded swamp is born. Swamps also may develop in sluggish streams or on floodplains.



Sadly enough, many marshes die before they can naturally evolve into swamps. Since pioneer times over 50 million of the nation's original 125 million acres of wetland have been drained for reasons varying from increased cropland to mosquito control. Of this remaining 75 million acres, only about 30 million are suitable for wildlife habitation. Experimentation has shown that increasing a wetland's water level to keep the water in motion is effective in mosquito control. The moving water carries the mosquito eggs, larvae and pupae through the marsh, thereby decreasing their chances for survival and increasing the productivity of the marsh.

Chemical pesticides, detergents, industrial pollution and human wastes, along with drainage, have served to decrease immensely the nation's wetland areas.

#### **Flood Control**

Wetlands also serve as a permanent natural flood control. If the water level of a 10-acre marsh is raised just one foot, over three million gallons of surplus water can be stored. During the hurricane of 1955, hundreds of towns in eastern Pennsylvania were ravaged by flood and many lives were lost. Hundreds of bridges, large and small, were washed out along the courses of rivers and streams. Two bridges directly below Cranberry Bog, a natural wetland preserve in eastern Pennsylvania, remained standing after the floodwaters subsided. The past drainage of our wetlands is now being somewhat compensated by multimillion-dollar dams and flood control projects. The unforeseen cost of drainage is now coming to light.

Sportsmen need not be reminded of the values of waterfowl and furbearers which inhabit wetland communities.

The varieties of life inhabiting wetlands took millions of years to evolve, yet man can destroy them all in only a minute fraction of that time. Every attempt must be made to save our



*Tom Fegely Photo*

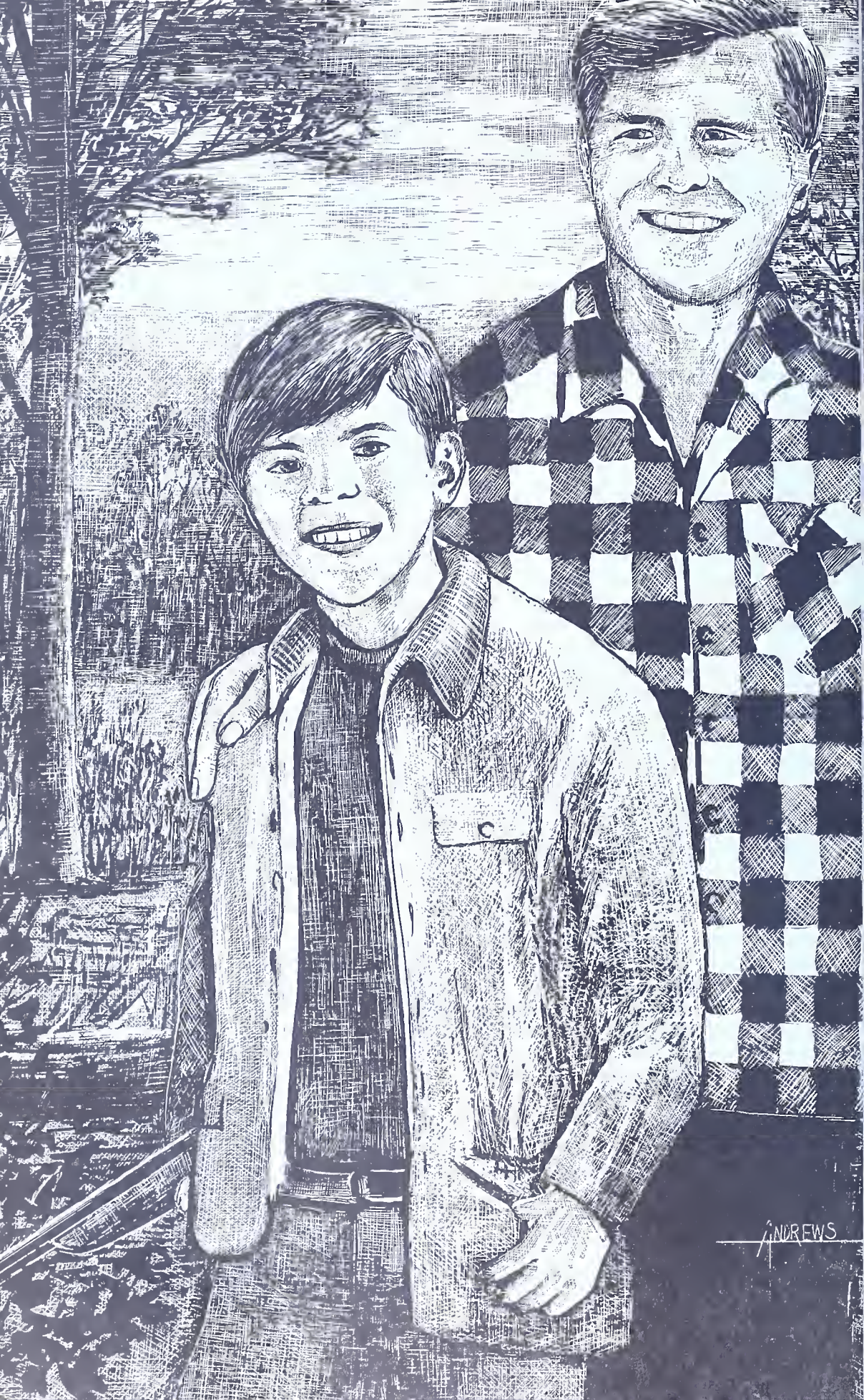
**DELICATE ARROWHEAD** flowers bloom in our summer marshes.

valuable bogs, swamps and fresh and salt water marshes. To accomplish this, both government and private action is necessary. The federal government's National Wildlife Refuge system, through land acquisition of areas such as Erie National Wildlife Refuge in the northwestern part of the state, is a step in the right direction. Valuable swamp and marshland in and around the Pennsylvania Game Commission's Pymatuning Goose Management Area in Crawford County is an example of the type of state program necessary for conservation of these areas.

Perhaps most important is the education of the public. People must understand the vital role wetlands play in the total balance of nature if our wetland heritage is to be improved.

Local action committees must not only preserve but also restore wet areas that have been abused. One acre of marshland can teach a youngster more about conservation and nature than the best textbook. It is with the present generation that our wetland future is entrusted. Unless we make full use of our existing wetlands, flocks of migrating ducks and geese may become only a passing memory.





ANDREWS



# A GOODLY HERITAGE

By Al Shimmel

*The evangelist entered our home. The orderly array of blue steel and polished walnut gleamed behind the glass doors of the gun cabinet. He stopped in his tracks, ran a practiced glance over our small collection of working guns, then centered his attention on my son, Glenn, then in his early teens, intent on cleaning and polishing his favorite rifle.*

*The preacher had as a British subject served several enlistments as a soldier rifleman before entering the ministry. I admit that my invitation to tea after the sermon had been a trifle devious. Less than an hour before I had fidgeted under his scathing indictment of American parents for allowing their children to play with toy guns and teaching them to use lethal weapons for hunting and sport. In short, he had charged us with allowing our children to grow into a nation of gangsters.*

*We sat for some time over our tea cups, discussing arms, ballistics and field sports. Glenn joined in the conversation and answered the Englishman's questions with enthusiasm. I was smarting under his sermon even though the conversation was cordial and friendly. During the talk I heard him murmur occasionally, "remarkable, remarkable." After a final inspection of our "stand of arms," I ushered the reverend gentleman to the door. Glenn had gone upstairs and was out of earshot, and at our parting I could not resist a final question. "Do you think he is going to be a gangster?"*

**T**AKE THE AVERAGE boy or girl, add a 22 rifle, training under adult supervision (preferably Dad's), a woodlot with a reasonable squirrel population and a few Indian Summer days. Mix thoroughly and season with the comradeship and small adventure of squirrel hunting. You will forge bonds that will laugh at the "generation gap," so beloved of today's sociologists. . . .

The hickory logs radiate pleasant warmth into the room. I slump in the easy chair and stretch my legs. One of my slippered feet accidentally nudges Hans, curled on the hearth rug. He raises his head and looks at me reproachfully, settles down again. The gray is thickening about his muzzle. He is showing his age but today he worked with enthusiasm. Our day was climaxed when he almost caught

a squirrel as it was intent on its foraging under a huge old wild cherry that bordered the timber. When he had a final shake after the squirrel had fallen to my shot he was content.

I am aware of the comfortable weariness that follows a day in the woods. The smell of Hoppe's No. 9 mingles with the fragrance of burning wood. Firelight gleams on the gun rack where the latest of a long line of 22s rests. It is a Remington Model 581, a gift of the family. It has the amazing quality of using a variety of ammunition with little change in the point of impact. I stir comfortably. A half century slips away. . . .

My hand was shaking as I thumbed back the hammer and dropped the block of the Stevens Little Scout. I felt Dad's hand touch my shoulder as I pushed a hull into the chamber and



**DAD PUT A STONE** in his cap, threw it some distance beyond the tree. As if by magic, the squirrel reappeared on our side, in full view.

pushed up on the little knob that closed the block. I raised the rifle and tried to align the sights. The big gray hung spreadeagled against the bole of the chestnut within easy range. The gun would not stay still. I fought the impulse to fire. Seconds ticked away. The squirrel slid around the tree and was lost from sight. My heart sank. I had muffed my chance.

Dad grinned, took off his cap, picked up a stone and tucked it inside. He threw it some distance beyond the tree. As if by magic the squirrel reappeared and peered back over a crotch in the direction of the disturbance. A nearby sapling provided a convenient rest. The sight settled. The squirrel flinched at the shot, hung for an eternity by one claw, then fell with a thump to the leaves. I ran quickly to the fallen animal. Humility is not required when you hold your first

trophy at the advanced age of twelve summers. It was of minor consequence that the bullet had struck almost two inches below my point of aim. The important thing was that I got it.

After Dad's cap had been retrieved and the rifle laid carefully on the fallen leaves, we sat together on a fallen log. Here I received my lesson in preparing game for the table. After stropping the blade of his pocketknife on his shoe top, Dad cut off the four feet and cut up each hind leg from the hock to the base of the tail. With a split stick he stripped the bone from the tail. The bone was cut off about an inch from the body. He pulled the skin over the body to the eyes, made a cut under the pit of each front leg and carefully removed the glands that resembled small brown grains of wheat. He removed the entrails, saving the liver and heart. After the gall bladder had been removed he returned these organs to the body cavity, stripped the hide back into place and tied the skin of the hind legs together to hold everything snug. He tucked it into my jacket pocket, allowing the tip of the tail to show.

#### **Pure Stand of Chestnut**

The seven-acre woodlot had been culled for firewood until it was practically a pure stand of chestnut. The trees were mature and bore an abundant crop of sweet nuts. Frost crisped the leaves and opened the burs. There was a constant pattering of falling nuts. Squirrels were scurrying about, most of them beyond range. Not for a quarter hour did another come within range. It was an easy chance but overconfidence resulted in a humiliating miss. Soon another squirrel carried a nut to the top of a nearby stump. I redeemed myself. This time I did the honors with the knife under Dad's watchful eye—a bungling, amateurish job that was finally finished. Two other squirrels came within range while I worked but these were allowed to escape. The gun was not re-



loaded until this squirrel joined the first in my pocket.

By midmorning I had killed six, which was far short of the generous limit of that day. I was eager to continue but was reminded that we had sufficient for our needs.

Dad and I hunted frequently during that autumn, taking turns with the rifle (we had only one). I learned to follow the squirrels from chestnuts to hickories, to walnuts to tulip pods and finally to locust pods. Frequently we hunted where the grapes hung in clusters from the timber crowns. Unconsciously I absorbed his philosophy. We took only enough to supply the table and used what we took. Game must be field-dressed immediately and properly. Game must be treated with respect. I was properly instructed in gun safety. When I suffered some lapse of awareness, I was reminded in such a way as to not forget again. One day I bagged a grouse as it ate grapes from a high vine. When I handed it to Dad, my cup was overflowing.

### Strictly Rifle Game

Squirrels were strictly rifle game. Vividly I remember the day that while grouse hunting I chanced to see a beautiful specimen of black squirrel. They were rather rare in our area. I could not resist the temptation. At home I laid out two grouse and the squirrel for inspection. My father looked from the squirrel to the shotgun I had used, then turned away without any comment except a barely audible "Hmmm." It was more forceful than any speech he could have made concerning my breach of hunting ethics. From that day, if I hunted birds in squirrel country I often carried a light rifle slung across my shoulders, in addition to the scattergun.

Game calls have come into common use during the last two decades. Decades ago my father had a trick that often coaxed a hidden squirrel into view. He imitated their barking

by clucking his tongue against his teeth or the roof of his mouth (two different sounds). At other times he called by sucking forcefully against his fingertips or the back of his hand. The sound produced was similar to that of the modern vermin call. This seemed to excite the rodents and brought them seeking the source of the sound, jerking their tails and protesting vocally against the disturbance. Occasionally a squirrel could be coaxed so close as to be almost within reach of the hand.

While using this method of calling I had an experience that was quite unusual. I had graduated from the Stevens to the joint ownership of a then new Model 39 Marlin. I had a fair knowledge of hunting techniques and often hunted alone. I headed for the big timber beyond the hill to test the new rifle on game. A rail fence connected the timber with an adjoining cornfield and I took my stand just



**OUT OF THE CORNER** of my eye, I saw a dark object speeding in my direction. Instinctively I ducked. A Cooper's hawk hurtled by.

inside the timber not far from the fence. A heap of fallen leaves at the base of a stump made a comfortable seat. It was late afternoon. The sultry warmth of Indian Summer hung over the hills. I was half asleep when I saw the leaves tremble in a high oak some distance down the slope. Watching carefully, I saw a gray moving about the timber crowns. The foliage and the distance did not permit accurate shooting. I began to call with my lips against my hand, hoping to draw it within shooting range. I practiced patience and called sparingly. To call with too much persistence often repels rather than attracts. Each time I saw the animal it had moved closer. It was now almost within range. My attention was centered on a tree some 20 yards distant.

Suddenly out of the corner of my eye I saw a dark object speeding in my direction. Instinctively I ducked my head. A Cooper's hawk, attracted by my calling, hurtled by. I felt the air from its passage on my cheek. My eye registered the yellow feet armed with black, needle-pointed talons, the hooked beak, fierce red eyes and half-closed wings that added speed to its streamlined body. My gaze followed the bird until it flared around a hemlock and was lost from view. I was so unnerved by the incident that when the squirrel I had been calling hung on the side of the tree in plain view I missed him by a wide margin.

Too many individuals, adults as well as juveniles, consider a 22 as a toy and handle it carelessly. Respect for this comparatively light rifle came to me with early experiences.

**The Game Law  
Violator Is  
Stealing From  
You!!!**

Practically every family in our rural community raised its own meat. My father was an expert butcher and was frequently called upon by less skillful neighbors to slaughter and cut up their meat. I accompanied him as a matter of course. To see a beef or a hog of 200 pounds and upward fall from a brain shot from the 22 was impressive indeed. It was one of my chores to prepare the head meat for such delicacies as ponhaws (scrapple) pickled tongue and braised brains. I had ample proof of the damage inflicted by this relatively low speed bullet.

### **A Working Gun**

The 22 was not only a sporting arm in the early part of this century but a practical working gun. When a woodchuck invaded the garden or truck patch, it was imperative to the family economy that he be eliminated. Within the range of 30 to 40 yards, a bullet could be placed in the head or neck. The 22 killed with efficiency. The meat was added to the family menu and the hide, dehaired with lime and neutralized with vinegar, was oiled until it was pliable, then cut into whang leather to be used for belt lacings, shoe strings and for harness repairs.

At the country shooting matches where the rules specified open sights and offhand shooting at 35 yards, the 22 was the rifle most often used. Many keenly competitive riflemen succeeded in "driving the tack." A good marksman was a respected member of his community.

With proper care a good 22 is almost indestructible. The old Model 39 that my father and I owned and used jointly is now being used to train my grandson. It is still today an accurate and efficient firearm.

Ours was a goodly heritage with strong ties and pleasant memories. It would be a tragedy if future generations were denied similar pleasures and traditions.



*Great Fun for All . . .*

# ***Coon Hound Water Races***

**By Nick Sisley**

**T**HE SUMMER SEASON certainly can't be regarded as "coon huntin' time." The ardent nighttime hunter is preempted from lighting his carbide light and turning Ol' Blue loose because there are too many leaves on the trees to see a ringtail anyway. Hot weather also means the dog will play out quickly, not to mention the hunters themselves. Besides, I feel it's not quite kosher to hunt when the youngsters of this bandit-faced species don't yet have full capacity in their running legs. So what's a coon hunter to do?

About the only summertime fun coon hound people found up until a few years ago was sitting on the porch and reminiscing about fall seasons of the past. No doubt during one of those summertime gabfests, one old codger (no one remembers who he is or where he came from—or cares either) got to thinking about the wily coon who always took to the water at the tail end of the chase. By jeeppers but it was a cold dip for the dogs on a clear night at the end of November. Some of the hounds quit the chase right at the water's edge. Only the best of the pack would dive in and keep that smart critter moving.

*MAY, 1972*



That old codger probably reached for the Bull Durham and a paper and thoughtfully rolled a sorry handmade cigarette while he more fully considered the possibilities of swimming coon hounds during hot weather.

That, or at least some semblance of it, was the start of coon hound water racing. It's a new sport and an all-American one, not one we inherited from some other country. In the last decade the sport has grown by leaps and bounds. Today it's one of the best attended types of field contests for dogs. Owners, handlers, galleryites, and sponsoring clubs all love it. There is something for everybody who comes, and that fact in itself is the most important key to this new sport's skyrocketing success. But remember—it all started because coon hunters didn't have anything to do in the summer-time!

#### Plans for Summer

These days when the first hint of warm weather breaks through, coon hound clubs across the country make plans for their summer program of water races. Many are held under the rules of the United Kennel Club (UKC), while at others the rules of the sponsoring clubs prevail. The latter have fun in mind, with perhaps a few dollars of cash involved. Under UKC rules the dogs vie for trophies and, even more importantly, for the points that help a dog gain recognition as a Water Race Champion.

This is an exciting event.

A group of dogs is turned loose at a signal to race after a coon in a floating cage being pulled across the water by some artificial means. They plunge in, start swimming, and once on the other side, the caged coon is pulled up a pole or tree. The dogs are given credit for making it to an imaginary line in the water first, second, third, etc. (a judge says which dog is "First Line," etc.), and for getting to the tree first. Many times the dog that is called First Line dog is also First Tree dog, but this is not always the case.

Over the years several refinements have been incorporated to help the water races move along more smoothly. One of the best innovations is a box that will hold five or six dogs in individual compartments. They are put into the boxes through the rear entry just prior to the "turn loose" signal. The front door is usually a hinged affair, and it covers the entire front of this unusual dog box. At the signal it swings open and all dogs are set free at once.

In full cry, they make a dash of a few steps across dry land, then hit the water. The waves and spray created by their exuberance is a sight worth seeing.

The coon gets a great ride himself. He's in a cage, and the cage is on a buoyant contraption that gives him a dry ride across the pond. The cage,

**THE RACCOON GETS A FREE ride across the pond, but the dogs have to swim—which they do, most vigorously, believing they can catch up!**





attached to an overhead cable, is winched across the water just ahead of the dogs, and then up the pole or tree at the far side of the pond.

Considerable time and money is necessary to set up a proper coon hound water race area. Building the pond itself is undoubtedly the highest costing project the sponsoring club will have to undertake. After that, the dog release pen must be constructed. It has to be especially well made, because the dogs inside are always in a veritable frenzy, trying to get out and at Mr. Ringtail who is stationed only a few feet in front of them.

Next comes construction of the overhead cables and some type of winch to ferry the coon across the water. This takes both a few dollars and no small degree of manpower and ingenuity. Grounds suitable for parking an array of cars, and some sort of building capable of turning out pounds and pounds of hot dogs and pop for owners, handlers, gallery and their families are also necessary.

#### Low Fees

Entry fees are usually low compared to most field trials—\$3 at a number I've attended, though some may go to \$4 or \$5. As a result, people show up from everywhere to swim their dogs, and many are willing to pay the fee for two, three or even four hounds. These events are popular. Even if a coon hunter doesn't have a dog that will hit the water with gusto, he may know someone that does. He'll come to cheer him on and give him a hand. He may bring his family, too, as may the owners of the hounds. Coon hound events have always stressed family participation, both women and youths handling dogs in all events and many times even having separate trials and bench shows. Having the family along not only makes for great out-of-doors experiences that help bind the group even closer, but it also adds to the crowd attending these events.



**DOGS TRY TO CLIMB pole to get coon, but he's safely out of reach. Note "head sock" that keeps water out of ears, eliminates head shaking which wastes time.**

Others attend because they haven't seen their hunting buddies for several months and they want to renew old acquaintances. Some come out of curiosity. They may not have a hound, but they're thinking about getting one. Finally, many come to "take a chance." They want to see how well they can judge the speed of a particular dog swimming. More about that in a moment.

When a water race event is announced, all the entries must be in by a specified time. When the zero hour is reached, the names of all dogs entered are put into a hat and the heats are drawn. A heat is the number of dogs which the release box will hold. In most cases that means five or six. Let's say 60 dogs are entered and there is room for six in the release pen. That means 10 heats, and these first ones are called qualifying heats.

They are run off, and the First Tree and First Line dogs advance to the semi-finals. That means 10 or more dogs running in the semi's. The top Line and Tree dogs here then advance to the finals and swim a heat by themselves to determine the ultimate winner. If our event is held under UKC rules, a dog gets 10 championship points for being First Tree dog in the

semi-finals, five points for being First Line dog. In the finals the First Tree dog gets 15 points, and the First Line dog gets 10 points. No dog may be awarded more than 35 points at one trial. To be declared a UKC Water Race Champion, a dog must attain 100 points and one First Tree and one First Line in the finals. For even further attainment, he can be called a Grand Water Race Champion if he accrues three first places in final events.

### **Some Run for Fun**

But, as was stated earlier, all events are not run under UKC rules. Some are run for the fun of it, with perhaps a little prize money offered. In these trials, the coon hounds are "auctioned off." Here's where the gallery fun comes in.

After the qualification heats, the winning dogs are called for and brought before the gallery one at a time. An auctioneer, usually a member of the club, starts auctioning off each dog. You are not really buying the hound, but are bidding on whether you think that individual dog is going to make First Line or First Tree in the upcoming heat. The highest bidder gets the ticket on that dog, and the holder of the winning ticket after the heat wins what was accrued in the kitty, all the money bid on each of the five or six dogs that competed in the swim heat. Both First Line and First Tree dog tickets are paid back. The club takes a percentage of this auction to defray expenses, a practice acceptable to everyone.

This auction is where the crowd gets its kicks. The bids are small, usually 50-cent increments, and anyone

with a little gamblingitis in his blood can raise his hand or nod. When all dogs are auctioned off, the auctioneer comes out with the colloquial, "All right, let's swim them dogs." The hounds are taken to the release pen, the start signal is given, and away they go in a flurry of speed and a spray of water—the crowd cheering wildly for the dogs they have bet on to swim a little faster, to catch up to the coon, to widen the gap from the rest of the pack.

A fair amount of training must go into producing either a water race champion or a consistent winner at the fun events. The dogs must have a consuming desire to chase raccoons. They have to break from the release pen immediately, be willing to hit the water with no hesitation whatever, swim straight after the coon, bound from the pond, race to the tree without shaking water, and, of course, be a naturally fast swimmer in the prime of condition.

Under UKC rules only registered coon hounds compete in the licensed events for championship points, and rightly so. But in the fun trials dogs of every description are permitted. Retriever strains, greyhound strains, every type you can imagine—all compete with the bona fide coon hound. It gives more people and more dogs the opportunity to have the time of their lives.

So it's no wonder that coon hound water races have gained such popularity in recent years. There's fun, excitement, competition and brotherhood for everyone, and it comes in the summertime, a great time to be out of doors.

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### ***Uphill?***

Wild turkeys have been clocked at 15 miles per hour on the ground.

### **Companionable**

Ants have two stomachs, one for their own use, and the other for storing food which is shared with other ants.



***Statistically, Poisonous Snakes Present Only a Minute Danger to Humans, Even Those Who Spend Much of Their Time Outdoors. Nevertheless, Some Persons Are Struck by These Snakes Each Year, and This Can be a Harrowing Experience, as This Man Discovered When He Was . . .***

# *Snake-Bit!*

**By Claude K. Clayberger**

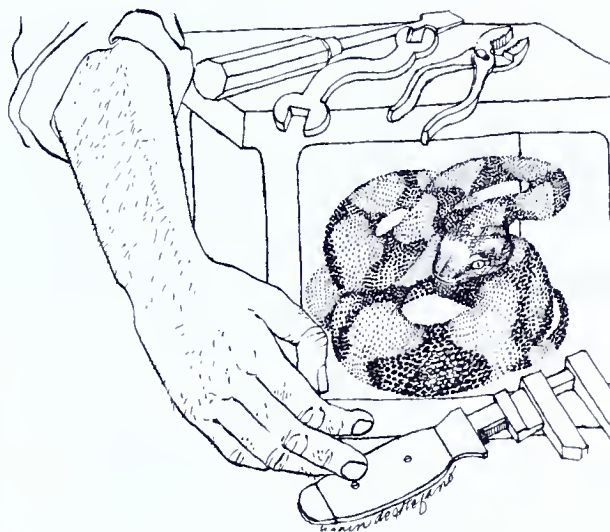
**I**T WAS A very hot June afternoon. The temperature soared into the 90s, and it was one of those uncomfortable sticky days. My fellow workman, Jim Fenstermacher, and I were installing an air conditioning unit in Sunbury. It was about 4:30 p.m. on a Saturday and it was overtime for us. We were working late to get this unit in operating order for the family to use over the hot, humid weekend.

All day long I had been laying my tools on a concrete block lying about three feet from the foundation of the house. No tall grass or weeds grew nearby. There were several bushes along the wall of the house, but not much ground cover underneath. The children's playground equipment was located approximately ten feet from this particular concrete block.

As I laid my wrench on the block, it suddenly slid off, and I reached down to pick it up. As I did, I felt something prick my finger. Looking closer, I saw a copperhead snake curled up inside the core of this block. All I could say to Fensty was, "The sonofagun got me!"

I recognized the snake immediately, as I am a ranger team coordinator for the Civil Air Patrol in Pennsylvania and we are in the outdoors a lot, and we study wildlife in our training. I am also a Red Cross first-aid instructor, and because of this training I knew I shouldn't become excited or I would go into shock.

I asked Fensty to get the truck and take me immediately to the hospital,



**AS I REACHED DOWN** to pick up my wrench, I felt something prick my finger. Looking closer, I saw a copperhead inside the concrete block.

a drive of approximately five minutes. The snake had bitten me on the ring finger on my right hand, and already the finger was beginning to swell. I put pressure on my vein above the bite. Due to my partner's excitement, he couldn't think of the quickest route to the hospital, so I had to direct him. All the way there, I thought he would go into shock instead of me. His wife told me later that she never saw him so shook up. Normally, things do not excite him.

We finally reached the emergency room of the local hospital, and I caused quite a lot of excitement there, because they have had very few poisonous snakebites to treat, especially

copperhead bites. In fact, I was told this might have been the first ever treated here. No resident doctors are connected to this hospital, and when the nurse called my family doctor, he was busy and wouldn't be available for at least half an hour. Furthermore, he had never treated a poisonous snakebite. Another doctor was available, but the only poisonous snakebites he had treated were in the Pacific



**I GOT ALL THE attention possible from the nursing staff, the attending physician and my family doctor, but it was still an ordeal.**

islands, during World War II, so he started looking through medical books for dear life. While this was going on, they gave me a tetanus shot and an allergy skin test to see if I would be able to take the antivenin serum which is obtained from horses.

The swelling was advancing all this time and was now up to my wrist, with my entire hand swollen and as hard as a rock. The pain was becoming excruciating but I had no sign of shock, such as dizziness, nausea, or rapid pulse, and my blood pressure remained good. By 6 p.m. I was put in a hospital bed. There was no sign

that I would have any allergy to the anti-venin serum, so they gave me my first shot.

This serum and the amount given is determined by the degree of swelling the patient has developed. The first shot is administered at two to five inches of swelling, the next at five to 10 inches, and the third at 10 to 20 inches. My first was given when just my finger was swollen; the second when my wrist was swollen; and the third when my entire arm was swollen up to my shoulder area. I learned later there is danger of this venom spreading to the brain, at which time you could die immediately. There is also danger of the venom gathering in the kidneys, and becoming overwhelming, and for this reason, a patient must force more liquids to flush these organs constantly.

#### **Hand Above Heart**

I didn't dare move, and had to lie flat, with my hand higher than my heart, for two days. When first admitted, the physician made an X-shaped incision on the fang wound and peeled it back and took about 75 percent of the flesh from underneath, to try to get as much of the venom out as he possibly could.

The April, 1971, issue of *GAME NEWS* carried an article entitled "Snakebite and the Hunter," which was a good article, but, believe me, you can read all the articles in the world, but nothing is like the real thing of having it happen to you. The suffering was intense for three or four days. Of course, I got all the attention possible from the nursing staff, the attending physician and my family doctor, but it was still an ordeal.

Finally, after the fourth day of hospitalization, I was allowed to go home, with the reminder to take it very easy, and not be active at all. I was told to soak my hand at least three times daily in very warm Epsom salts water, and I also had to take antibiotics daily. This was fine, but after my sec-



ond day at home, I began to itch. Not just here and there, but all over! You couldn't lay a quarter on me between the rash marks. I had the best case of hives that I have ever seen. The doctor told me to get to the dispensary as fast as possible. He gave me an allergy shot and some pills and said that this was a reaction to all the anti-venin shots I had taken. All in all, 13 different shots had been given to me. The doctor told me never to take horse serum again in any form. One type of tetanus serum comes from horses, and he said I can never take that kind or it could kill me instantly, so every five years from now on I must get a booster shot of human tetanus serum.

Also, if I am ever bitten by a poisonous snake again I will have to make sure I don't get any horse anti-venin serum. I also had severe abdominal cramps as another reaction to the serum.

Finally, after three weeks, I was able to return to work. I also went back to the same spot to finish the job I had started on the air conditioning unit, but, believe me, I sure kept a watchful eye out for any hiding place a copperhead could possibly find. I

thought I would tell of my experience so any of you reading this article would really know what it's like to be bitten by a poisonous snake and remember the following rules:

1. Always look before reaching or stepping into a place where a snake might be.
2. If bitten, get to a doctor or hospital immediately.
3. Do not panic. This is *most* important, and could save your life.

#### Doubly Sure

By the way, after taking me to the hospital, Jim Fenstermacher and another employe went back to the place we were working and killed the snake. It was still curled up inside the same concrete block and hadn't moved. It measured two feet long, and according to our District Game Protector, Clyde Laubach, this is extra long for a copperhead in this region. He stated that the average in this area is about 18 inches for an adult.

The snake was put into the freezer compartment of a refrigerator, and when I was out of the hospital and well again, I had the "pleasure" of burying it. But first I made doubly sure it was dead.

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## Book Review . . .

### Animal Traps and Trapping

Traps were one of the earliest tools devised by man and used to improve his standard of living, and this comprehensive book by the Keeper of the Department of Zoology of the National Museum of Wales in Cardiff deals with the subject in fascinating detail. Beginning with a discussion of pits dug during the Paleolithic by Stone Age men to capture such creatures as the woolly mammoth, the author goes on to cover in detail dozens of types of traps—both natural, such as the Venus fly trap and ant-lion pit, and man-made, such as the prehistorical treadle traps and the baleen snares of Eskimos. While most of us probably think of traps as used only for mammals, they also are often employed to take fish, birds and insects too, and these types are examined also. There is even a chapter on the ethics of trapping, plus a general review of legislation pertaining to trapping. (*Animal Traps and Trapping*, by James A. Bateman, Stackpole Books, Cameron and Kelker Streets, Harrisburg, Pa., 1971. 286 pp., \$8.50.)

*Birches Are Everywhere in Pennsylvania. Easily Recognized, All Are Useful to Men, Birds, and Animals. Be They White, Black, Yellow, Red, or Gray, They Are All Trees of Beauty. And Your Author Was Once a . . .*

## *Swinger of Birches*

By J. Almus Russell



*Don Shiner Photo*

**IN AN EARLIER DAY**, gray birch saplings were cut for hoop-poles. Other varieties were used by wet- and dry-coopers to hold the wooden staves in place.

**T**HERE ARE NEARLY forty species of birches. Five found in Pennsylvania—the white, black, yellow, red and gray—are the most important. They are easily spotted.

Whether for bark, fuel, or lumber, buds, leaves, and seeds, or roadside and forest beauty, all birches are important. However, the white birch is the pattern.

This queen of the forest, often called

the canoe, silver, or paper birch, sometimes attains a height of 50 to 75 feet, a trunk diameter of a yard. Plaster-white bark covers this handsome tree. This much-sought outside sheathing is resinous, waterproof, and highly flammable. Once it is stripped off, it does not renew itself. Instead, an orange-hued undercoating remains which turns black when weathered.

The Indians found birch bark a necessity. They stripped it from the trees in the spring when up-surgingsap loosened it from the trunks. Then they soaked this “white-skinned cloak” in hot water to make it pliable. Wiggams were covered with the bark. Canoes were sheathed with it. Hinged doors hanging down over tepee-openings were shaped from it.

Indians and Colonists alike had additional uses for the inner silken bark. On it, the Red Man drew pictures—his primitive writing. It was also the settler's substitute for writing paper.

The aborigines found that birch sap had a sugar content. They boiled it down for syrup and sugar, storing the forest sweets in bark barrels, tubs, and buckets.

In the process of making syrup and sugar, the bark kettle was filled with sap. Then it was placed directly over a bed of live coals. The edges of the coal bed were covered with ashes so that no flame could possibly lick up the outside surface of the kettle and set it on fire. In no case must any flame touch the bark above the waterline, else a flame might lick up the side and set it on fire.

Hunters and fishermen depended



upon white birch bark for many other purposes. From a bark sheet, the nimrod fashioned a horn for calling moose. The seams of this forest megaphone were stitched together with spruce roots or basswood bark. The horn itself might be 18 inches long, the mouthpiece opening, three-quarters of an inch in diameter, and the larger end of the horn, five inches across.

In the winter, birch goggles protected the eyes of hunters and woodsmen from snow-blindness. They were fabricated from a rectangular piece of bark, worn like a mask. Very narrow eye-slits were cut with the edges turned down to block the reflected rays of the sun.

### Many Uses

The angler made an excellent creel by sewing pieces of the bark together with fine spruce roots. The lean-to builder cut out bark rectangles similar to shingles. These provided a tight roof. Spruce gum, pine pitch, and fir balsam sealed the seams and cracks.

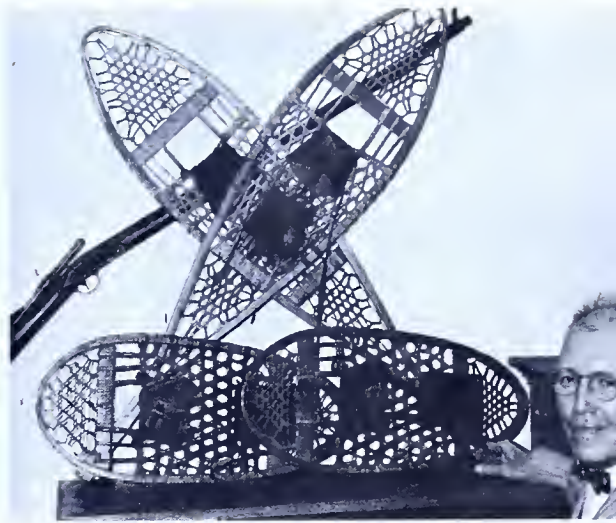
As an emergency food, the tender, inner bark, when boiled and pounded, made a flour. Mixed with fish oil or fish broth, this provided a forest iron ration. An Indian agent once lived for seven weeks on this alone.

White birch is the caviar of fire-place fuel. The logs are slow-burning, throwing off a resinous perfume and yielding the whitest flame of any wood. The demand exceeds the supply. Birch charcoal is still used in small forges, in picnic grills, in water filtration, and medicinally.

In an earlier day, branches heated old-time bake ovens, indoors and out. This oven fuel gave off an intense heat. The ashes were often swept into the ash chamber with an Indian broom, also made from birch.

Children attending district school were often punished with birch switches. A crowning insult was to have the teacher charge the cost of the rod on the pupil's bill.

From settlement days, white birch



**AUTHOR DISPLAYS HIS birch-framed snowshoes. Bearpaws, bottom, are used in brushy hill country, others in more open areas.**

wood was used in making trenchers, plates, cups, and other wooden tableware. In addition, birch lumber provided flooring and furniture, skis, toboggans, snowshoes, and sleds.

Birch browse is also a staple deer food. Buds and seeds are eaten by the ruffed and the sharp-tailed grouse. The beaver feeds on the bark and uses the trunks and branches for making dams.

Another relative, the black birch, also called cherry or sweet birch, grows as high as 60 feet. The bark is a dark reddish color, tightly marked with pale horizontal lines. When distilled, the bark, buds, and twigs produce oil-of-wintergreen.

Birch tea is brewed by steeping the bark and twigs in hot water. The inner bark is also an important ingredient of birch beer, a refreshing forest beverage.

### Black Birch Beer

- 4 quarts chopped birch inner bark
- 4 quarts strained honey
- 16 quarts birch sap
- 1 cake soft yeast
- 1 slice toasted rye bread

Pour chopped inner bark into five-gallon crock. Stir honey into birch sap. Boil for 10 minutes, pour over chopped bark. Cool. Strain out bark and return liquid to crock. Spread yeast on toasted bread, float it on



**HOOP-POLE SHAVERS** relax at checker game in early-1900s shop. Shaving hoops was a profitable farm industry in years past, and birch saplings were a necessity.

top of the liquid. Cover with a cloth. Let ferment until cloudiness starts to settle—about a week. Bottle and cap, store in a dark place. Serve ice cold.

The sap, half as sweet as maple, has a much greater flow. Ten gallons of sap boils down to one pint of syrup. The flavor is somewhat like that of sorghum. Fermented sap makes a woodland vinegar.

Two gallons of the inner bark, finely chopped, will dye a pound of wool reddish brown. Two pounds of green birch leaves make a yellow dye.

#### **Clear, Hot Flame**

As a fuel, the wood burns with a clear, hot flame. Cut or crushed, it smells like wintergreen. The heavy, hard, close-grained lumber is made into furniture, boxes and pails. The twigs provide a forest chicle which is pleasant chewing. The browse is similar to that of other birches. Hares, cottontail rabbits, and white-tailed deer feed on the branches. Ruffed and sharp-tailed grouse feast on the seeds.

The yellow birch, sometimes called the silver or swamp birch, is an attractive tree. It has a lustrous bark which peels off in thin, filmlike curls. This tree, which sometimes attains a height

of 100 feet, grows in moist ground and rich soil. It often sprouts on mossy logs, on the tops of decaying tree stumps, or in swamps. The wood is much in demand for plywood, interior finish, and furniture. A palatable tea may be brewed from the leaves. Rabbits, squirrels, and grouse feed on the bark.

Most common of the birches is the red or river variety. The bark varies from reddish-brown to cinnamon-colored, with black plates on the trunk. This shaggy-barked tree grows 30 to 50 feet tall, with a trunk diameter of one to two feet. It thrives in swamps, on stream banks, and in lowlands subject to flooding. While its chief value is in preventing erosion, the ruffed grouse and wild turkey feed on the seeds.

The gray birch, also called hoop-pole, old field, poverty, and poplar birch, invades abandoned fields, pastures with poor soil, and burned-over forest areas. It may be identified by its soiled white bark stamped with conspicuous black triangles. Unlike the loose covering of the white birch, the gray birch's covering is close fitting. This tree is often bent to the ground by ice storms. It is an excellent cover for eroded and cut-over land.



Gray birch twigs are slender, reddish-orange-brown, and coated with a film which makes them gray in the winter. The wood is light, soft, non-durable. It is limited in use to paper pulp, spools, fuel, and charcoal.

During the latter part of the 1800s and into the early 1900s, shaving hoops was a profitable farm industry. Hoops were fashioned from every variety of sapling birches — red and gray preferred. Then coopers bought these wooden hoops, using them to hold barrel staves.

The ruffed grouse and many song-birds eat the seeds. The white-tailed deer browse the twigs.

Schoolboys of long ago prized the pliant trees. They climbed the trunks to a point where they finally lost their balance, then swung to the ground without breaking tree or branches. Robert Frost describes the process beautifully in one of his poems called "Birches"—

Earth's the right place for love: I don't know where it is likely to go better. I'd like to go by climbing a birch tree, And climb black branches up a snow-white trunk *Toward* heaven, 'till the tree could bear no more, But dipped its top and set me down again. That would be good both going and coming back. One could do worse than be a *swinger of birches*.

**That's How It Is**

Males of many insect species do not survive the winter. Survival of the race is assured through the females, which are fertilized before they bed down for the winter.

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# Old Mel of the Endless Mountains

By Joe Ryan



**O**RION THE HUNTER was long gone in pursuit of his starry quarry as O'Ryan the Hopeful left home and hearth for another try at that most elusive of fauna, *Meleagris gallopavo*, the wild turkey of Pennsylvania. Spring gobbler season being relatively new in the Keystone State, I had determined to make the most of the few hours allotted to me each morning, and this was my fifth day of the seven-day season. A 10-minute drive brought me to the home of my hunting companion and fellow worker, John Step-anik, and a farther 25 miles in the pre-dawn darkness found us in the area selected for the rise or fall of our sporting hopes, State Game Lands 57 near Forkston, in the beautiful Endless Mountains of Northeastern Pennsylvania.

The blackness of night still covered the land as we arrived. Experience

had taught that, with most game and especially with turkeys, it's more apt to be the worm that doesn't lie late abed that catches this bird. *Meleagris* being a very wary customer, it behooves the enterprising nimrod to "git thar fustest with the mostest" before old Mel has even hit the deck.

We doused ourselves thoroughly with insect repellant, which is almost as necessary in this May season as the shotgun. It's a good thing Sir Gallopavo's scense of smell isn't as keen as his eyes. A brief check of equipment, a silent wait as the darkness gave way to the soft gray light of dawn, a beginning chorus of awakening birds—first an owl, then the whippoorwills, cardinals and catbirds—and then the straining to sort out from that noisy serenade even one little gobble. Overall, emphasizing everything, the anticipatory thumping of our own hearts.

The hunt was begun.

We slid from the car and walked noiselessly down the Game Commission access road, slipping now and then in the mud left by a light shower the previous evening. At this time of year, rubber footwear is a must because water from melted snow is still plentiful and spring rains bountiful. A decided bonus otherwise is the absence of the heavy clothes which are a part of winter deer hunts. The first mile was covered in jig time, too quickly perhaps, caution—not speed—being of the essence here, even though we stopped every hundred yards or so to listen for that tantalizing gobble.

John and I were both using calls made in Wellsboro by Lou Stevenson. We took turns stroking them gently, hoping to provoke an answer. Again and again we tried, and at last came the throaty reply we were searching for. This sound has been described as



spine-tingling. Believe me, that's true! If this sound—this hair-raising, primal vibrato—were the only prize a turkey hunter received for his loss of sleep, he would still be well rewarded. Thwarted, frustrated, but rewarded nonetheless.

Our plan, once a bird was located, was to approach as closely as possible without calling anymore. Too much turkey talk and the tom is liable to become suspicious and clam up. However, this one continued to sound off every few minutes, luring us off the road and down a dim path into the shadowy hemlocks. We were sure that every bend in the trail would bring us close enough to try to call him in. However, just as the proverbial bear that went over the mountain saw only other mountains, so each time we rounded a bend or topped a rise, all we saw was another bend or another rise, with our prize beyond it.

Finally, he drifted to our right and was joined by a crony. Since we were unable to pin either of them down, John decided to strike out in a solo attempt to entice one in. I continued slowly down the path for about a half mile, stopping several times to give a series of yelps. After crossing a small creek I was about to take a turn in the trail when an ear-splitting *gobble-obble-obble* resounded from just ahead.

I stopped, my heart pounding, wondering whether or where to hide. The decision was made for me by an encore from the big boy himself. Obviously he hadn't seen me. Yet he was so close that concealment seemed the order of the moment. I quickly knelt behind a large upturned tree root and waited breathlessly.

And waited.

And waited.

**Give Game News  
to a Friend**

Silence.

Slowly, I slipped the heavy rubber band from around my box call and stroked the call gently. Four times. Hardly had I placed it on the ground when another gobble almost knocked my hat off. His Honor, although still not in sight, was certainly heading right toward me, full steam ahead, and announcing the fact for all he was worth, caution thrown to the winds.

### **Safety Off**

I eased the safety off my 12-gauge pump, still afraid to breathe. The next gobble told me he must be in shot-put range. I carefully peered around the root and there was as magnificent a creature as I'd ever dared hope for, Old Meleagris himself, in all his iridescent, flaming-wattled, fan-tailed glory, "struttin' on down the avenue," proudly proclaiming his majesty in every royal inch. A super specimen in any man's book!

I somehow managed to maintain my cool, to fight down an almost overpowering awe (buck fever, it's called in December), and aligned the bead on his head and neck. A load of No. 4 shot bowled him over with surprisingly little commotion. I waited a minute, another shell chambered in case he should get up, then hurried toward him as he fluttered his last. Success! It was almost an anticlimax after the long week, the tense wait. . . .

I slung the huge fellow over my shoulder (Bonnice's Market back home in Forty Fort later weighed him in at 20½ pounds without innards!) and with triumph adding wings to my feet high-tailed it back to find John. Fortune did not smile on him that day . . . his bird had beat a silent retreat after hearing my shot. We prowled around till closing time, 10:00 a.m., but in vain. All we saw were the deer we had been looking for last December. But there will be other spring seasons — and, hopefully, other gobblers.

# Eastern Hemlock

*Tsuga canadensis* (Linnaeus)

By Ken Calnon



**THE HEMLOCK**, Pennsylvania's official state tree, has been known to live over five centuries. Though the tree sometimes reaches a height of 100 feet, which makes it one of the most impressive species in our forests, it takes some 200,000 of its seeds to weigh one pound.

**T**HE 100-foot hemlock tree towers its lofty crown high above the upper reaches of White Oak Run. Beneath its branches the clear water of the run swirls among moss-covered rocks, then races over a stretch of brightly colored pebbles and gleaming white sand. Suddenly, the rushing water slows and glides into a tranquil pool. In the dark shadows of its branches, a brook trout, native to these waters, darts upward and dimples the still surface of the pool as it takes a May fly. It then returns to the undercut bank beneath the hemlock tree.

*Leaves*—Hemlock leaves are linear, flat, shiny dark green on top with two longitudinal whitish-green lines underneath. Larger leaves are about  $\frac{1}{2}$  inch long,  $\frac{1}{16}$  inch wide and have rounded or slightly notched tips. At first glance there appear to be only two rows of leaves per twig; closer observation, however, will reveal a third row of somewhat smaller leaves, about  $\frac{1}{4}$  inch long, attached along the upper side of the twig. Individual leaves are attached to the twigs by a small woody stem that persists after the leaf has fallen. Hemlock is an evergreen; nevertheless, its leaves gradually fall during their third year.

*Flowers*—Staminate (male) yellow; pistillate (female) green.

*Cones*—The cones hang from the tips of the twigs and are  $\frac{1}{2}$  to  $\frac{3}{4}$  inch long; pale green while ripening, becoming tannish-brown when ripe. Hemlock cones mature in one year and usually remain on the twigs throughout winter.

*Seeds*—Attached to each thin brown cone scale are two tiny seeds ( $\frac{1}{16}$  inch long). A fragile, semi-transparent wing is fastened to each seed, making the total length of the seed and wing



approximately 5/16 inch long. Due to the seed's fractional weight, it takes roughly 200,000 of them (with the wings removed) to weigh just one pound.

**Bark**—There are two distinct layers of bark. The inner layer is thin, white and somewhat fibrous. The outer bark varies between cinnamon-red and gray in color; it is about ½ inch thick on young trees and as much as two to three inches thick on mature trees. The bark of old trees constitutes as much as 15 to 19 percent of the total cubic volume of the tree.

**Habitat**—Hemlock trees favor cool, moist areas such as stream sides, margins of swamps and bogs, and steep northward mountain slopes.

**Wood** — Light-brown tinged with red, or nearly white; lightweight (26 pounds per cubic foot, dry weight); not very strong.

Hemlocks are among the Keystone State's oldest trees. One large stump had a diameter of four feet ten inches. Its annual growth rings showed it reached an age of 542 years! This hemlock was approximately 64 years old when Columbus first sighted the New World.

Hemlock lumber is used extensively for frame work, sheathing, sub-flooring and shipping crates. During World War II, one United States Army Depot used 12,000,000 board feet of hemlock for making crates to ship guns and ammunition.

Hemlock's bark is richer in tannic acid than any other tree bark in Pennsylvania. This acid was an important ingredient in the leather tanning industry, and at one time the bark was

### Will You Help?

On December 13, 1971, Arthur Bartman, 15, of 825 Montgomery Avenue, Boyertown, Pa., was sitting in a field in Potter County, waiting for daylight before entering the woods to begin deer hunting. A stray bullet fired by an unknown person struck him in the back, damaging the spine and paralyzing him from the waist down. Though now out of the hospital, Arthur is still undergoing therapy. This tragic accident will affect him and his family as long as they live. The Boyertown Rod and Gun Club is sponsoring a fund for the young man. If you care to help, please send your contribution to the Arthur Bartman Fund, General Delivery, Boyertown, Pa. 19512.

of more value than the wood. Many huge trees were cut down, and the logs left to rot after being stripped of their bark.

Hemlock is ordinarily a shallow-rooted tree and is able to thrive in thin soil. However, when the tree is growing in thin soil, it is not very wind-firm. During the spring of 1969, a severe wind storm hit Ricketts Glen State Park and immense hemlocks, 70 to 80 feet in height and up to 2½ feet in diameter, were uprooted and smashed to the ground like matchsticks. I was deeply saddened to see these forest titans strewn by the wayside.

Tall, well-formed and stately, the beautiful and valuable hemlock was well chosen as Pennsylvania's official tree.

---

### Slim Pickings in Snow

During winter months, birds die chiefly from starvation rather than from the cold.

### Misses All the Color Shows

A dog sees only in black and white, the retina of its eyes having no "cones" to flash color impulses to the brain.



**BILL HEFFNER** and Clark Beidler, Sinking Spring, above, Verle Sterling, Miller-ton, below.



**JIM DUNNING**, Fredonia, N. Y., with 20½-lb. gobbler.

*Here Are Some . . .*

## Successful

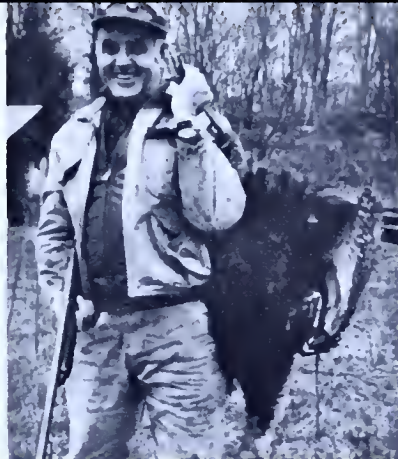


**PAUL STERNER**, above, of Bath, Tim Whaling, right, Erie, and Paul Sura, below right, New Philadelphia, and their turkeys.

**FRED RANIERI**, Norristown, below, and Bob Weidner, Fleetwood, right.







**DALE BYERS**, left above, Shippensburg, and **Jim Flynn**, Philadelphia, right.

## y Hunters



**TERRY HICKS**, Salina, above, and **Angelo Cagnacci**, of Wall, below.



**GERLAD THRUSH**, above, Chambersburg, and **Regis Pappert**, below, of Pittsburgh.



**ALBERT PETRICK**, Wilkes-Barre, below, left; **Al Kohl**, Ingram, right.





**ELVIN SANGREY, Lancaster, left; Cathy Smith, of Barbours, with her father Don, center; Ray Bales, Sr., got his gobbler on Forest-Warren County line.**

## Editorial . . .

*(Continued from Page 1)*

Hunting and Angling." This was a study of the eleven western states plus Alaska and Hawaii. However, the results seem directly applicable to other parts of the country, as everything affecting them—economic contributions, harvests, factors affecting wildlife management and finances, political and social factors, etc.—are similar everywhere and were fully considered in this study.

When all was said and done, a ratio of 5:1, nonresident to resident fee, was recommended. This is the ratio Pennsylvania had for many years, it is the ratio asked by the Game Commission before the recent non-resident increase, and it would be the ratio in effect if the resident fee were increased to \$8.20 as now requested.

On to other points. Some wrote to oppose buying more land, apparently feeling we have enough for today's needs and the future can take care of itself. I disagree. There is only so much land in Pennsylvania, each year more disappears under concrete, and each year many hunters would have no place to hunt if it weren't for Game Lands. We need all we can get right now . . . and I don't believe in ignoring the future. Such thinking is far out of date. Many of today's problems exist because our forefathers thought the future could take care of itself. Let's not perpetuate their errors.

Some asked why we need to train more Game Protectors. One said we now have too many . . . and in the next sentence

added that he hadn't seen one in five years. Strange logic. The truth is, we currently have 141 districts in the state, five of which are vacant, which means we have exactly 136 District Game Protectors in the field. This compares with 136 districts in 1958, to answer another question. DGPs rarely leave Commission service until they retire. That is where they're going now. The first class was graduated in February, 1937, and these men are now retiring at a faster rate than they are being replaced . . . thus the stepping up of the schedule at the School of Conservation.

To answer a few more specific questions: Nobody buys my hunting license for me; all Commission employees, up to and including the Executive Director, buy their own licenses at full cost. The eight members of the Game Commission serve without pay. No antlerless deer licenses are "reserved" for nonresidents, although the Game Commission long has advocated that a small percentage should be. Services will deteriorate unless there is a fee increase for the simple reason that everything costs more every year now—and has been going up steadily for the last nine years while the license cost remained the same—and if the money supply remains fixed there has to be a reduction in some phases of the operation. All phases contribute to the hunter's desires in some way, so he's going to end up with less unless revenue is increased. There's no escape from this. You might not like paying more for a license—I don't either—but facts are facts and we might as well face them.—*Bob Bell*

## Little Guy

The sparrow hawk's diet consists chiefly of insects and mice.





# FIELD NOTES



## Something to Think About

**BLAIR COUNTY**—While attending a Sportsmen's Club meeting recently, I heard a well known speaker make the following statement: When I see school children or Boy Scouts cleaning up the garbage along our roads and streams and on our public lands, I feel a deep sense of shame, for it is my generation that is responsible for this mess. We carelessly throw our trash out of cars as we drive, or leave it along the streams when we fish, or just drop it in the woods when we hunt, and then we shamelessly ask these little children to clean this mess up for us. The next time you see a group of children picking up garbage, count the number of adults working with them." I believe the above statement can apply to all of us.—Land Manager J. A. Lukas, Hollidaysburg.

## Way, Way Back!

**ELK COUNTY**—One night during February, several people from around the Wilcox area decided to go for a snowmobile ride. They started at St. Marys and were going to Clarmont up the Shawmut grade. Crossing State Game Lands 25, the leader of the caravan hit a skunk. The second and third snowmobiles couldn't stop and ran over it. The fourth snowmobiler saw the object and thought the first guy had lost his hat. He swerved to the side and as he went by he scooped up the skunk. I wonder if they made him ride at the end of the line after that?—Land Manager R. J. Rea, Wilcox.

## A Real Help

**NORTHUMBERLAND COUNTY**—The Hunter Safety Course is an accepted program in the schools in my district. When I have gone in to set up the courses the teachers will say that the pupils have been looking forward to my visit. The cooperation in all the schools has been nothing but the best in all the years I have had the program in the schools.—District Game Protector C. E. Laubach, Elysburg.



## Sounds Like a Fish Story to Us

**BERKS COUNTY** — Another deer story as related to me the first day of the season by the bearer of a scratched gun: "While aiming at a buck I noticed a movement out of the corner of my eye. I turned to find a second buck running toward me. It knocked the rifle from my hands. I picked the gun up and shot the second buck."—District Game Protector K. M. Zinn, Bernville.



### Hang in There, Gary

**DAUPHIN COUNTY**—The 1971-72 hunting season was my first as a Game Protector and I believe that my family was thoroughly initiated into the life, what with the countless telephone calls—many received in the wee hours of the night — using my children's swing set to hang deer on before distribution to needy families, warming up dinner because I was always late, etc. But what really topped off the season was the night I boiled a bear head in the kitchen. And I only have 34 years to go for retirement!—District Game Protector G. W. Packard, Milersburg.

### A Long Way from Home

**CLEARFIELD COUNTY** — Earl Valimont, a resident of the Frenchville area, informed me that his son Keith was home on leave from the Army during the past deer season. Keith bagged an antlerless deer and when he returned to his duty station, he took with him a portion of the meat. Arriving at his duty station, Keith and several buddies were able to enjoy a Pennsylvania white-tailed venison feed in Ethiopia, along the banks of the Red Sea.—District Game Protector C. L. Keller, Clearfield.

### How True It Is

**ERIE COUNTY**—During a father and son banquet, a film illustrating predation by showing a fox pursuing a squirrel was shown. Following a delicious chicken dinner, the group was given an opportunity to ask questions about the film. A boy of about five asked, "What would the fox do to the squirrel if he had caught it?" I replied, "The same thing you did to the chicken tonight."—District Game Protector A. C. Martin, Erie.

### Chuck Who?

**LAWRENCE COUNTY** — One of my deputies told me that while he was shaving his school-age daughter brought a March, 1971, **GAME NEWS** to him. He asked her what kind of an animal was on the cover and she said it was a Chuck Ripper. He told her she was wrong, that it was an otter. She then wanted to know why "Chuck Ripper" was on the cover if that wasn't the name of the animal. — District Game Protector C. A. Hooper, New Castle.

### Dependable Workers

On Saturday, February 19, the Northwest Division hosted 940 Boy Scouts and counselors on a browse-cutting expedition in Forest and Warren counties. This has been an annual affair for the past six years but this year had the largest number of boys to date to participate in this expedition. These boys endured the worst snowstorm we have experienced in this area for some time, but in spite of the weather they put forth their best efforts to provide food for wildlife and I am sure that many of them were made aware of the elements that wildlife must endure and that there is more to conservation than an enjoyable hunting trip.—Supv. L. E. Sheaffer, Franklin.



### Put His Foot in It

**LACKAWANNA COUNTY** — At a local gun club meeting, the question and answer session hit upon the annual dog-running-deer situation. One gentleman objected vociferously to the "propaganda" released by the Game Commission on this subject, claiming there is no such problem and that the few times they do occur could be abruptly halted if the cash penalties were stiff enough and the names of dog owners were published. Guess whose dog was shot the following day at the site of a deer killing in progress! Needless to say, our friend had much less to say when notified and even less to add when asked if he preferred one newspaper over another. — District Game Protector T. C. Wylie, Moscow.

### How's That Again?

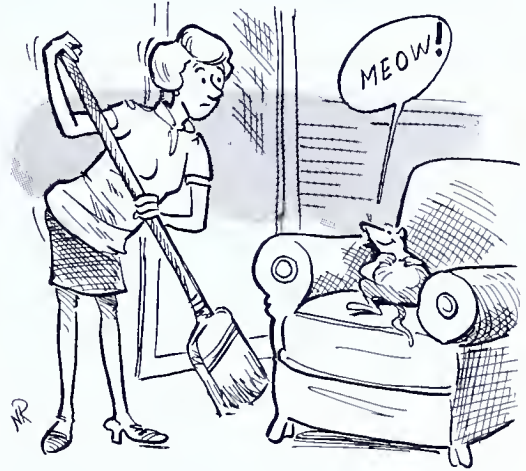
**YORK COUNTY** — What happened in February? Nothing happened. Well almost nothing, and what happened always happened to people who didn't want everyone to know what did happen. — District Game Protector R. L. Yeakel, Red Lion.

### Willing to Help

**ALLEGHENY COUNTY** — In the past month, I attended two meetings and seven days of sportsmen's shows where I talked to no less than 2000 people. Out of all these people, I can recall only one who was against a license fee increase this year. Apparently almost 100 percent of Pennsylvania's sportsmen are willing to support the conservation programs which the Game Commission has started and are proud that it is sportsmen's money, rather than tax money, that is supporting the wildlife conservation programs in this great state. — District Game Protector R. Belding, Baden.

### Nice to See

**DELAWARE COUNTY** — While patrolling near the Delaware River, I observed a flock of approximately 35 swans near Tinicum Island. The birds stayed in the area for about a week before moving on. — District Game Protector R. C. Feaster, Aston.



### A Soft Spot

**LUZERNE COUNTY** — The last week of February brought another heavy snowfall in the Sweet Valley area and my wife and I were talking with Mrs. Thomas, who lives at North Lake where many cottages are used for summer homes. It seems some cats in the area are living under one of the summer homes. During the deep snow, Mrs. Thomas left the door of her back porch partly open and placed food there for these homeless cats. On checking the back porch recently, she found two cats sleeping on a soft chair and between them was a young opossum. The cats jumped up and ran out at her arrival, but the opossum decided this was a good area and had to be driven from the porch with a broom. We aren't sure whether or not he will be back after this eviction. — Law Enforcement Assistant R. H. Myers, Sweet Valley.

## That Would Complicate Matters

**LANCASTER COUNTY** — While bear hunting this past season, one fellow I know had his first chance at a bear. After several shots, the animal ran down the hillside and our hapless hunter trailed after, loading his rifle as he stalked his quarry. As the bruin appeared once again, his rifle failed to function. Why? A tube of chapstick was wedged in the breech instead of a cartridge.—District Game Protector R. E. Gosnell, Millersville.



## One for Me, One for You

**GREENE COUNTY** — Les Secoy, the Fayette County delegate to the Southwest Division Federation of Sportsmen's Clubs, and Ed Van Cleave, of Holbrook, were hunting grouse on State Game Land 179 during this past season. Les had a chance for a double. He shot one grouse, swung and killed the other, which fell into some brush. He picked up his first bird and Ed and he started to look for the second. They found a clear trail of feathers—and a very distinct odor of fox. Both men are quite experienced hunters, and both are quite sure the thief was a fox, as both have good bird dogs and they would not touch the trail of feathers.—District Game Protector R. Askey, Waynesburg.



## We Won't Tell

**LUZERNE COUNTY**—One evening a deputy of mine visited taxidermist Bill Lacina at his shop. The deputy noticed a large bee's nest in the corner of the shop and told Bill that the nest was a small one, that if he wanted to get a light and a saw, he would show Bill a giant bee's nest. They drove out to the tree and the deputy shined the light on the nest. To their surprise they saw that someone had inflated a large gray balloon and hung it on the limb to resemble a bee's nest. The deputy told Bill not to tell anyone about the experience, because if anybody found out about it he would never hear the end of the incident.—District Game Protector E. R. Gdosky, Dallas.

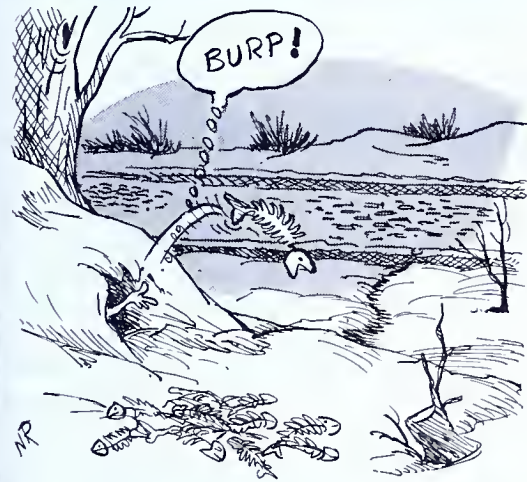
## Old Faithful

**BERKS COUNTY** — February 29, Leap Year Day, brought an unexpected bonus to students at Boyertown Junior High School. The mallard duck which nested for the two previous years in an interior court returned this year and made her first deposit toward the class of 1972. One egg in the nest; how many more to go?—District Game Protector J. A. Leiendecker, Reading.



## Buddies

**FULTON COUNTY**—Somehow, the assumption that turkeys and deer are not compatible has become fairly widespread. This is not true, as the following episode proves. A landowner told me that he and his family enjoyed watching a flock of seven turkeys taking advantage of the efforts of our deer during the heavy snow of late February. The turkeys would come into the edge of a cornfield about 3:45 p.m. Around 4:00 p.m., four deer would come out and start pawing snow. They would do the heavy work and the turkeys would do the clean-up scratching. They moved and fed as one unit and seemed to enjoy each other's company.—District Game Protector C. E. Jarrett, McConnellsburg.



## Handy Pantry

**SCHUYLKILL COUNTY** — While checking for beaver on the streams in my district in February, I was amazed at the amount of mink sign that I came across. One crafty old mink had set up housekeeping near a trout hatchery and had a regular highway worn in the snow from the creek to the raceway full of trout. With trout so available, this was one mink that didn't run out of groceries this winter.—District Game Protector S. L. Opet, Hometown.

## Making Some Progress

**CUMBERLAND COUNTY** — I am very happy to see that we are becoming more conservation minded. I am getting requests for programs from people of all ages — elementary students to adult groups. They want to know what is going on outdoors and what is being done in conservation.—District Game Protector J. R. Beard, Shippensburg.

## Learned His Lesson

**JUNIATA COUNTY**—I was with a friend behind several other men who were walking in the same direction. One of them glanced around and, noticing my uniform, jokingly remarked to his companions, "Let's go out and shoot a deer tonight." One of his buddies, who hadn't seen me, replied, "To heck with that, I already own a piece of the rock." Just then he turned and I recognized him as one of a group of jacklighters we had apprehended last fall—and he did indeed "own a piece of the rock."—District Game Protector R. P. Shaffer, Mifflintown.

## A Case of Double-Think

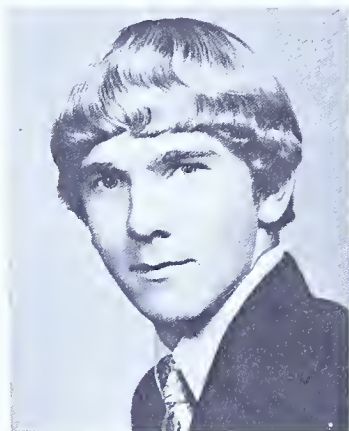
**McKEAN COUNTY** — A four-year-old niece, all cleaned up for town, appeared with her face streaked with an older sister's makeup. After the forthcoming punishment she replied, "Well, it was your fault, you weren't watching me." I recalled this when an individual I had arrested for killing game before the season remarked that I was to blame. His reasoning was that I had known his intention and should have advised him that I was watching, which would have stopped him from violating. — District Game Protector G. W. Waldman, Lewis Run.



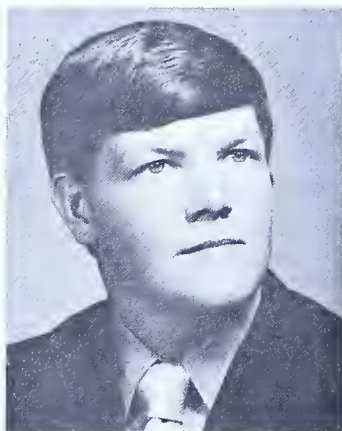
# CONSERVATION NEWS



By Ted Godshall



Bob Knepp



Bill Wallace



Jeff Selfridge

## 1971 Wildlife Conservation Awards

**F**OR THE SECOND consecutive year, the top three awards in the FFA Wildlife Habitat Development Contest went to Clearfield County students working under Vo-Ag instructor W. J. Mackereth of the Clearfield High School. First-place winner was Bob Knepp, second place went to Bill Wallace, and third place was awarded to Jeff Selfridge. All of the top winners finished well up in last year's final results also. This is an outstanding achievement and the winners and instructor are to be commended.

In the Game Commission's six Field Divisions, the 1971 winners were: Northwest — Pat Fitzpatrick, Butler County, Rolla H. Benton and Raymond English, Erie County; Northcentral—Ted Adams, Barry Maines and Scott Graham, Clearfield County; Southcentral—Jay Knepper, Fulton County, Ted Wagner, Juniata County, and Steve Brunner, Blair County; Northeast — Mike Chamberlain, John

Moretz, and Ed Preston, Bradford County; Southeast — Sherman K. Ewing, Chester County, and John Rhoads, Berks County; Southwest—no entries.

The Pennsylvania Department of Public Instruction and the Game Commission are cosponsors of this competition, which may be entered by any vocational agricultural student in Pennsylvania. The students set up work plans in land management, predator control, conservation education, marsh and stream development, firearms safety, etc. These plans must be approved by the student's Vocational Agricultural area advisor, his Vo-Ag teacher and the local Game Protector. Projects are inspected by Game Commission representatives and Department of Public Instruction personnel. Judging is done by comparing the area with photos taken before work started. Prize money of \$1000, provided by the Game Commission, is divided among the winners.





**ROSEMARY TERREGINO**, Meadville, proudly exhibits her Crawford County trophy. The 12-point had a 21-inch spread, weighed 186½ lbs.



**NORMAN RUSH, 16, RD 1, Carmichaels,** and his big buck from McKean County. The non-typical trophy had a total of 21 points, weighed 200 lbs.

## 1971 Buck Harvest Up in 41 Counties

**S**PORTSMEN who were quite concerned about the number of deer in Pennsylvania a year ago and predicted a poor hunting season for white-tails might be surprised to hear that the buck harvest increased in 41 counties in 1971.

Just a year ago many hunters were advocating the closing of antlerless deer seasons, petitions were circulating calling for changes in the Game Commission's whitetail management program, Game Commission explanations of the situation were being labeled "propaganda," predictions were being made about the "elimination" of the deer herd, and all kinds of charges were being leveled at game managers.

During the 1971 seasons hunters reported taking about 2000 more bucks than during 1970. The 55,602 reported harvest figure is perhaps 15,000 to 20,000 more than the quantity and quality of the habitat should be producing.

Report cards returned by hunters to the Game Commission show how remarkably close the harvest was in both years (see table). In only seven coun-

ties did the 1971 harvest differ from the 1970 harvest by more than 200 bucks. Of these seven counties, five had larger harvests than the year before.

A year ago a good many hunters thought that the deer herd was in trouble in the northcentral part of the state, but report cards returned by successful hunters showed that 1000 more bucks were taken in the 10-county northcentral area in 1971 than in 1970. The biggest gain was recorded in Potter County, 2281 compared to 1603 in 1970.

In round figures, here is how buck harvests compare for the two years in the different regions of the state:

	1970	1971
Northwest	9,400	9,500
Southwest	6,700	6,900
Northcentral	12,800	13,800
Southcentral	8,500	9,600
Northeast	11,700	11,100
Southeast	3,800	4,500

The table on the next page shows how buck harvests for the two years compare on a county basis.

## ANTLERED DEER HARVESTS

<i>County</i>	<i>1970</i>	<i>1971</i>	<i>County</i>	<i>1970</i>	<i>1971</i>
Adams .....	252	412	Juniata .....	657	727
Allegheny .....	136	155	Lackawanna .....	369	350
Armstrong .....	832	858	Lancaster .....	218	208
Beaver .....	173	159	Lawrence .....	89	81
Bedford .....	1,118	1,159	Lebanon .....	270	295
Berks .....	534	579	Lehigh .....	148	159
Blair .....	670	726	Luzerne .....	1,474	1,344
Bradford .....	2,266	2,406	Lycoming .....	1,971	1,827
Bucks .....	524	550	McKean .....	1,328	1,682
Butler .....	746	737	Mercer .....	301	302
Cambria .....	764	840	Mifflin .....	662	754
Cameron .....	432	430	Monroe .....	814	739
Carbon .....	607	586	Montgomery .....	47	47
Centre .....	1,466	1,494	Montour .....	101	126
Chester .....	114	120	Northampton .....	200	218
Clarion .....	1,135	1,143	Northumberland .....	364	425
Clearfield .....	1,866	1,802	Perry .....	1,231	1,305
Clinton .....	937	876	Pike .....	912	677
Columbia .....	1,013	1,098	Potter .....	1,603	2,281
Crawford .....	730	1,325	Schuylkill .....	1,077	1,232
Cumberland .....	337	520	Snyder .....	355	400
Dauphin .....	610	583	Somerset .....	1,229	1,151
Delaware .....	8	11	Sullivan .....	1,215	1,055
Elk .....	1,200	1,199	Susquehanna .....	939	909
Erie .....	358	383	Tioga .....	1,612	1,884
Fayette .....	439	427	Union .....	329	361
Forest .....	1,356	1,200	Venango .....	1,614	1,549
Franklin .....	785	825	Warren .....	1,801	1,624
Fulton .....	573	618	Washington .....	301	340
Greene .....	347	462	Wayne .....	1,118	857
Huntingdon .....	1,830	2,139	Westmoreland .....	1,096	1,184
Indiana .....	1,331	1,340	Wyoming .....	470	508
Jefferson .....	1,251	1,195	York .....	386	453

## Book Review . . .

### “Gunsmithing,” by Roy F. Dunlap

Gunwriter Warren Page once said there were more gunsmiths per square mile in Pennsylvania than anywhere else in the country, and that probably was no exaggeration. Unfortunately, not all of them are as skilled or knowledgeable as they could be, perhaps because they've tried to learn their trade by cut and try. Several technical schools have helped greatly, but for those who cannot get such training but still want to learn to do a topnotch job in gun repair, customizing, or whatever, this big book has most of the answers. One of our great gunsmiths, Dunlap covers in considerable detail all phases of this field, from workshop layout and basic tools through useful dope on welding, heat treatment, parts making, barrel chambering, action alterations, blueing, sight mounting, stockmaking, etc., using comments based on firsthand experience to illustrate everything. Though not a new book—it was first published in 1950, updated in 1963—the information is timeless. (*Gunsmithing*, by Roy F. Dunlap, Stackpole Books, Cameron and Kelker Streets, Harrisburg, Pa., 742 pp., \$10.)



# Officer Trainees Picked by Commission

**T**HE Pennsylvania Game Commission has announced the names of 24 men who have been selected for the fifteenth class of Game Conservation Officer trainees. The 24 were chosen in March from about 1000 applicants after a series of written, oral and physical examinations which began in November. This number of applicants is the largest response ever to Game Commission recruitment efforts for future Game Protectors.

Seven of the trainees have been serving the sportsmen of the state as Deputy Game Protectors.

Members of the group will undergo approximately eleven months of intensive training at the Game Commission's training school, the Ross Lefler School of Conservation, located near Brockway in Jefferson County. Trainees reported to the school on March 27.

Included in the school curriculum are subjects such as wildlife management, public relations, game and fish laws, legal procedure, animal and bird identification, land management practices, etc.

In addition to the academic training, members of the class are assigned to work with field personnel during periods of peak activity. Following graduation next year, the trainees will be assigned to Game Protector or land manager positions throughout the state.

Members of the new class follow:

Gary W. Becker, RD 3, Tunkhannock.

Robert D. Buss, 1924 Rockingham Drive, Bethlehem.

William E. Carll, Box 172, Wattsburg.

Chester P. Cinamella, 1217 Houserville Road, State College.

Frank B. Clark, 2020 Mill Road, Boothwyn.

Raymond Condo, 70 Miner Street, Plains.



**Game Commission Training School**

Gordon J. Couillard, 1007 Charles Street, Pittsburgh.

Barry R. Hambley, Box 181, RD 1, Patton.

Chester J. Harris, Jr., RD 2, Ulster.

William L. Hutson, Marienville.

Cortes L. Keiser, Grampian.

Donald D. Martin, 216 Sycamore Drive, State College.

William H. McIntire, Box 145, RD, Big Run.

Barry K. Moorc, 600 Ruby Street, Derry.

David L. Myers, 192A Circle Drive, New Cumberland.

Ralph C. Patty, Jr., 4199 Logans Ferry Road, Murrysville.

John R. Randolph, 194 Broad Street, Milroy.

Terry A. Saylor, Rural Route 3, Berlin.

John E. Schweitzer, 621 Mercer Street, Turtle Creek.

William D. Shultz, 127 Stevenson Street, Westfield.

Lowell D. Snyder, 326 Pine Street, Bellefonte.

Barry L. Warner, RD 2, Red Lion.

Michael P. Widmer, 200 Widmer Avenue, Lower Burrell.

Stephen C. Zegalia, 3322 Bridlepath Drive, Easton.



**TOM BUTCHKOSKI**, of Hershey, and the white ring-necked pheasant he bagged during the past hunting season. Not a true albino, it had black eyes.



**LEN KOHAN**, Central City, displays two white muskrats he trapped in the 1971 season. This color variation is rare among muskrats.

### **19,000 Game Birds Released in State**

More than 19,000 game birds were released in the state this spring under the Pennsylvania Game Commission's stocking program. About 1700 wild turkeys of both sexes, 3000 male ring-necked pheasants and approximately 14,600 hen pheasants were liberated.

Under the Game Commission's stocking program, larger numbers of birds are released in the fall, both prior to and during the hunting seasons. In addition to turkeys and pheasants, the Commission will also release bobwhite quail this fall.

### **Game Commission Receives \$1,390,431 in U. S. Funds**

Pennsylvania will receive a record of \$1,390,431.42 as its share of Pittman-Robertson Wildlife Restoration and Research Funds for the 1971-72 fiscal year, according to Game Commission Pittman-Robertson Coordinator John Doebling. The figure is about \$127,000 more than the federal funds made available to the state the preceding year, and approximately \$110,000 more than the previous record allocation to Pennsylvania, established in 1969-70. Included in the 1971-72 apportionment is the sum of \$108,303 for hunter safety activities. This represents new funds made available through the 10 percent tax on handguns and ammunition.

Pittman-Robertson funds are used for the Game Commission's wildlife habitat development, research and hunter safety programs. Federal aid programs for wildlife restoration are administered by the Interior Department. Funds come from excise taxes levied on sporting arms and ammunition. Each state's allocation is based on the number of paid hunting license holders and land area. Under the program, states spend their own funds on approved projects and are then reimbursed up to 75 percent of the cost.



## Highway Deer Kill Continues to Rise

Deaths of deer on Pennsylvania highways are continuing at a high rate, Game Commission reports show. During January, Game Commission personnel picked up 1432 whitetails killed by vehicles on roads in the state. In January of 1971, there were 1245 highway deer deaths recorded, while in January of 1970 the figure was only 653. In the same month, 77 deer were removed because of damage to crops. The figure for January, 1971, was only 10, while in January, 1970, the figure was 34.

Significant reductions have been recorded in losses of whitetails to dogs. In January, 1972, only 90 deer were pulled down by dogs, compared with 178 during the first month of last year, while the figure for January, 1970, was 432.



*PGC Photo by DGP Dick Furry*

**BOY SCOUT Mike Smith with DGP Jack James during Huntingdon County Civic Day. Scouts representing the various troops throughout the county spent the day with officials performing their routine duties.**

## Game Farms Welcome Visitors June 4

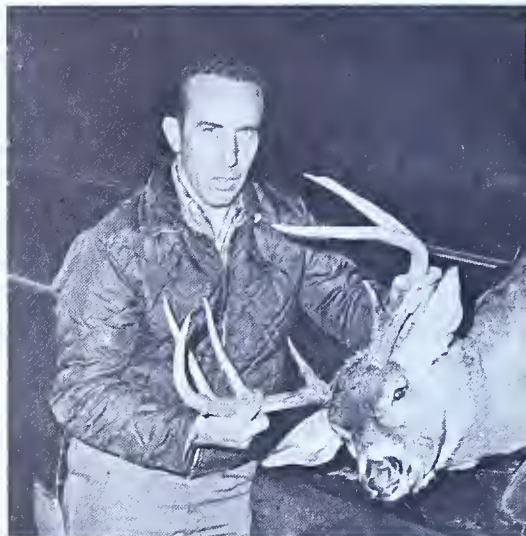
Open house programs will be held at all Game Commission Farms on Sunday, June 4, from 1 to 5 p.m. Game Commission personnel will conduct tours and explain how various game birds are hatched and reared. The six locations are: Eastern Game Farm, between Limerick and Schwenksville; Western Game Farm, three miles southeast of Cambridge Springs on Route 408; Loyalsock Game Farm, five miles north of Montoursville on Route 87; Wild Turkey Farm, 17 miles north of Montoursville between Barbours and Proctor; Wild Waterfowl Farm, two miles northwest of Geneva; Southwest Game Farm, three miles south of New Bethlehem near Distant, on Routes 28 and 66. Everyone is welcome.

## Pennsylvania Trappers Association to Meet

The 35th annual convention of the Pennsylvania Trappers Association will be held May 19-21 at Big Knob Grange and Fair Grounds at Rochester (Beaver County), Pa. There will be exhibits, contests, and demonstrations throughout the entire three-day affair. The business meeting will be called to order at 10 a.m., Saturday, the 20th. The public is invited to attend. There will be a large area for parking with a special section for campers with electrical hookups.

For additional information write: Cheryl Bushey (Secretary), 4380 Broadhead Road, Aliquippa, Pa. 15001.

# a look at ... HUNTING & WILDLIFE



*Photos by Thad Bukowski*

**RAY BALES, JR., HARLANSBURG, left, took nice 9-point near his home, while John Colbert, right, took his 176-lb. 8-point near the Ohio border in Lawrence County.**

## *Who Pays the Bill?*

**By Donald Zimmerman**

**Wildlife Conservation Education Specialist**

**E**NVIRONMENTAL PROBLEMS—particularly air and water pollution—are common topics nowadays in newspapers and magazines, on radio and television, and in our everyday discussions. The first question many citizens ask is: "What can we do?" The next is: "Who will pay the bill?"

This environmental crisis of the 1970s might be compared with the wildlife crisis of the late 1800s. Perhaps there's a lesson to be learned.

A century ago, as our nation's growth accelerated, large quantities of wildlife were taken to feed our increasing population. Some species of wildlife were over-exploited. When game populations dropped to low levels, it prompted some citizens—pri-

marily hunters—to action. Such groups as the Pennsylvania State Sportsmen's Association, the United Sportsmen of Pennsylvania (Scranton), the Wildlife League, the Philadelphia Fish and Game Protective Association, and the Lewis and Clark Big Game Club of Pittsburgh, provided the driving force for Legislative Act 187 which established the Board of Game Commissioners in 1895.

In 1901, nonresidents were required to purchase a \$10 hunting license. Half of that fee went to the county in which the license was purchased, half to the Commission. The first resident license fee, \$1, was required in 1913 and periodic increases were made through the years to finance the grow-



ing wildlife management programs. This money is the primary income for the Game Commission's work. But rather than talk of money itself, let's see where it comes from and what it has done for wildlife management and the sportsmen of Pennsylvania.

Foremost is the acquisition of more than 1,100,000 acres of State Game Lands. Not only are these lands used for hunting, but they also provide unlimited opportunities for hiking, bird watching, nature study, wildlife photography, and other outdoor activities. For each tract of land, detailed management plans have been completed.

The white-tailed deer is America's most popular big game animal, and Pennsylvania has one of the greatest herds in the nation. For the past decade, the average reported annual harvest has been over 107,000, with another 20,000 or so unreported. Yet at the turn of the century, deer were almost extinct in this state, and in 1915, the first year for which accurate records are available, only 1287 were taken. The phenomenal increase can be attributed to the logging industry, which made great areas of browse available in the early part of this century, and to the Commission's efforts—from the early stocking, trap and transfer, and refuge programs, to today's sound biological management. But although our deer herd is famous throughout the nation, it is not as well known that the money which helped make it possible (and which continues to operate the overall program) came directly from our sportsmen who bought hunting licenses. Tax money was not involved, nor were any "protectionist" groups, or whatever. The hunters "created" this deer herd, and they did it by buying hunting licenses.

Our other big game animal is the black bear. It has never been numerous, and this relative scarcity has heightened its status as a trophy. However, it could well have been extinct by now had it not been given protec-

tion here in 1905. Pennsylvania in fact was the first state to protect this animal, and by controlled seasons, forbidding the shooting of cubs, etc., the Game Commission has been able to maintain the black bear as a significant game animal in this state. Through continuing research programs, financed by income from hunters' licenses, the black bear will doubtless provide hunting opportunities for many future generations of Keystone sportsmen.

Today's wild turkey population is another result of sportsmen's dollars. Under the Game Commission's programs, the turkey was brought back from a point of almost non-existence until today this magnificent game bird is found throughout most of the state.

### **Then There's the Ringneck**

Then there's the ring-necked pheasant. He's another direct result of the sportsman's dollars at work. Money from the sale of hunting licenses enabled the Commission to initiate large-scale stockings in 1915. This Oriental import took to his new home and today is found in many areas of the Commonwealth.

These are some results of the sportsman's money. Behind each lies extensive programs of law enforcement, research, land management, propagation and information-education.

Though most funds for our wildlife programs come from the sale of hunting licenses, there are other sources of revenue. An important one is the Federal Aid in Wildlife Restoration. In 1937, the Pittman-Robertson bill placed an 11 percent excise tax on the sale of sporting arms and ammunition throughout the nation. This money is collected by the Federal government and returned to the states on a prorated basis for programs approved by the U. S. Fish and Wildlife Service.

Last year some \$35 million was returned to the states, while the total amount distributed by this program over the years is more than \$400 million. This money too, even if indi-



**THE RING-NECKED pheasant is another result of the sportsman's dollars at work. Hunting license money made this exotic import common in Pennsylvania.**

rectly, comes from sportsmen. And it is worth noting that some years ago, when there was a movement in the federal government to abolish this tax, the sportsmen insisted that it be continued in order that the various wildlife programs could benefit.

In recent years, the Game Commission has received over \$1 million annually from the P-R fund. This helps finance various programs of importance to sportsmen. For instance, we are continually working to find the most effective ways to manage wildlife resources in the face of dwindling habitat. Other studies currently being funded include those on deer, wild turkeys, rabbits and pheasants.

Other Pittman-Robertson funded projects in Pennsylvania include the development of small marshes, waterfowl impoundments, 1500 miles of roads to food plots, 20,000 acres of food plots, operation of the Howard Nursery, the distribution of some five million seedlings annually, and technical assistance with the Cooperative Farm Game projects. Timber inventories and mapping and management plans for each State Game Land are also being completed with the help of P-R funds. Under the present setup, the Game Commission pays for these programs and then is reimbursed up

to 75 percent of the cost from the Pittman-Robertson fund.

The recently enacted Dingell-Hart bill diverts the federal handgun tax from the general revenue to wildlife restoration and hunter safety programs. Funds from this bill were first used by the PGC during 1971.

Hunters contribute to many other programs that benefit wildlife. As a result of Federal regulations enacted in the 1930s, sportsmen hunting migratory waterfowl are required to purchase a "duck stamp." Money from the sale of these stamps is used for the purchase and development of waterfowl refuge areas.

Hunters also support such private organizations as local sportsmen's clubs, the National Wildlife Federation, and Ducks Unlimited, while the ammunition manufacturers support the Wildlife Management Institute and National Shooting Sports Foundation. All these groups help to promote and encourage sound biological management of our wildlife resources.

Long before "ecology," "environment," and "pollution" were common household words, the hunter was backing conservation movements. He saw what was happening, not only to game animals but also to other animal and bird species, and to the environment. He reacted, he worked, and he paid the bill for those creatures that countless other citizens also enjoy today. Everyone who likes seeing wildlife should remember that it was—and is—the hunter who has backed the legislation and pushed and fought for the programs which made it all possible.

#### **Suggested Reading**

"The Hunter and Conservation," 24 pp., 1970, 25c. National Shooting Sports Foundation, 1075 Post Road, Riverside, Conn. 06878.

"Pennsylvania's Wildlife Conservation History," 76 pp., 1970. The Pennsylvania Game Commission, Harrisburg, Pa.

"The White-Tailed Deer in Pennsylvania," by Stanley Forbes et al, 40 pp., 1971, price 50c. The Pennsylvania Game Commission, Harrisburg, Pa.



# WHERE AM I?

By Les Rountree



**A COMPASS WHICH PERMITS easy visual alignment with visible topographic features is recommended.**

**B**EING LOST IN the woods is a terrifying experience for the novice hiker. It can also be more than a bit unnerving for the well seasoned outdoorsman. If you spend enough time hunting, fishing and hiking in the more remote regions of our state you will eventually become what is politely referred to as "turned around." In the vernacular of the sourdoughs, being turned around never means lost until you are forced to spend a night in the boonies against your wishes.

There is, of course, only one way to completely avoid getting lost: don't go into the woods! There are hundreds of cases on record of persons being hopelessly lost and later, when rescued, it is discovered that the individual in question was only a hundred yards or so from his automobile or base camp. Such cases sometimes have humorous endings but others, unfortu-

nately, do not. I'll deal with the subject of being lost in a forthcoming column, but this month let's talk about how to avoid becoming lost — or "turned around," if you prefer.

No one, regardless of his back-country expertise, should attempt to walk into unfamiliar territory without a good map. A good map is not only a form of life insurance but a lot of fun to study during the off season. Like flashlights, I have a thing about quality maps, as I spent a good share of my Army days gathering material for cartographers to construct maps from. Most highway maps and those delightful little information sheets put out by tourist agencies are worthless for the hunter and cross-country hiker. They were drawn up for motorists and tourists who will rarely get away from a paved highway.

The very best maps for the forest

traveler are the ones compiled by the Geological Survey, a unit of the United States Department of the Interior. A topo index for Pennsylvania may be ordered directly from the Distribution Section, U. S. Geological Survey, 1200 South Eads Street, Arlington, Va. 22202. This index sheet lists the 37



**SPORTSMEN HAVE** a wide choice of designs in compasses. Generally, a medium size is best for it's big enough to show degrees rather than just the cardinal points, yet small enough to carry.

Pennsylvania dealers who can supply topo maps, or they can be ordered from the above address at a cost of 50c per sheet. Dealer prices may be higher than survey prices. A master list is available and shows the location (on a state map) of the various quadrangles. You need order only those quads that you relate to the immediate adventure at hand. They are available for all states. In addition to showing highways and streams, these maps have the terrain indicated in contour intervals, and even show individual buildings in remote areas. With such a map, usually referred to as a "topo sheet" (short for topographic sheet), and a reliable compass, the amateur should be able to move from place to place without getting turned around too many times. The important matter is learning how

to read the map and use the compass.

In spite of the glamorous tales which deal with Indians and backwoodsmen having a perfect sense of direction, no one on the face of this earth can travel from one unmarked spot in the wilderness to another unmarked spot without some assistance. It's possible to come close and eventually find your destination through the aid of stars, streams and other natural landmarks, but to hit a target on the button, a map and a compass are necessary.

Note the scale on the bottom of the map. The quadrangle that I referred to for this column was the Cornplanter Run Quad which covers the northern portion of the Kinzua Dam area in Warren and McKean Counties. The scale on this map indicates that about two and one-half inches equals a mile. This is important in calculating just how far it is between your starting place and the final destination. Contour intervals are shown on most maps in 20-foot increments. This means that between any two adjacent lines there is a change in elevation of 20 feet. This is important in determining your route to avoid the really steep climbs if that is your intention. The shortest distance between two points may be a straight line, but it isn't always practical or even possible to follow one. Steep cliffs, water barriers or natural topography may prevent the straight line approach.

The next thing to do is orient the map. Lay the map on a picnic table or a flat spot of ground (never on a car hood or near an area of metal such as overhead phone or electric lines) and lay the compass with the needle freely moving on the spot on





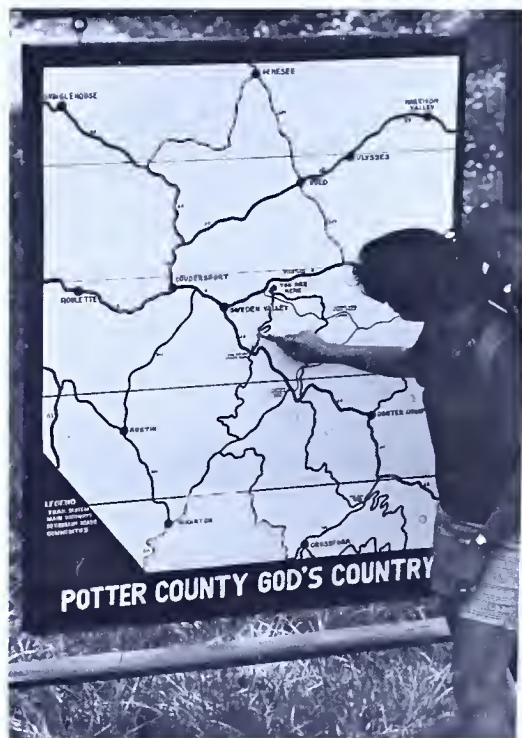
the map where you happen to be standing at the moment. Turn the compass until you have the needle pointing at the "N" or North mark on the compass face. Now, without moving the compass, turn the map until the magnetic north line on the bottom of the map lines up with the needle. Your map is now properly oriented. To read the map and plan the attack, you should be facing north along with the map and the compass needle. Quite simply, you must know where you are before you begin any trek. The case-hardened veteran who knows where he is before beginning a hike has one up on the stranger. He's already been oriented. The hiker who takes off before proper orientation is inviting disaster, especially if the hike will continue for more than a few miles.

Determine where it is that you want to go on the map. By using a straight edge or by eye it will be seen that your destination is, let's say, 48 degrees in an easterly direction from magnetic north. That is the general direction in which you must head. I say general, because the true direction is slightly different. This occurs because *true* north is almost never in exactly the same direction as *magnetic* north. On this particular quad there is a declination difference of 7 degrees. On most hikes this won't make much difference, but if you plan a jaunt of 20 miles or more you'll have to make allowance for declination.

### Straight Line Impossible

Since it is impossible to walk on a straight line through the woods you must, in observing your line of travel, pick out a landmark to walk to. It may be a particularly large tree, a prominent rock or a bend in a stream. Walk to it, take another reading on the compass and walk to the next marker.

The direction you are traveling, expressed in degrees, is called your "azimuth." The direction pointing back to



**HIKERS CAN USE** a general map such as this to orient themselves before starting off, but precise topo maps, used in conjunction with a good compass, are necessary in the bush.

your starting place, if you want to retrace your steps, is called the "back azimuth." It is determined by either adding 180 to your azimuth or subtracting 180 from it, whichever will give you a number not exceeding 360—the number of degrees in a circle.

If you do come to a natural obstacle that you cannot go around, it will be indicated on the topo sheet. Then you must recalculate your position by referring to the map, reorient and follow the new heading. By moving from point to point on the map there is little chance of anything going wrong . . . if you believe the compass. This is a great failing on the part of beginning cross-country hikers. They do everything right and then for some reason or other decide that the compass is wrong and take off on their own. For a compass, even a cheap one, to be less accurate than your internal one is a most unlikely possibility.

## Moving?

Be sure to send change of address to **GAME NEWS Circulation Department, P. O. Box 1567, Harrisburg, Pa. 17120. Send both new and old addresses; allow six weeks for processing.**

There are, however, good and less-good compasses. The best one for hikers that I've found is the GI lensatic model. This particular compass has a luminous face and a sight with cross hair that enables you to aim quite accurately between reference points. The dial is large enough to read without bifocals and it may be carried in the shirt pocket without discomfort. Millions of basic trainees have used them for their night map reading problems and, at last report, the armed forces are still using the same compass. They have yet to lose a soldier by reason of a faulty compass. If you can't find a surplus GI model, most sporting goods stores have a comparable model or can order one for you. The little compasses that pin to your shirt or the wrist models are not suitable for serious hiking. The dial is too small to read and there simply isn't enough room to print the degree markings. The larger the compass face, the more accurate it can be. There is a limit to the size you can conveniently carry, of course, but so many are made that it's easy to find one that's suitable.

If you stay more or less on your originally planned azimuth and remember to bring along a small protractor you can have the fun of determining your position at various locations. As you reach a point on the trail where a distant landmark is visible and you can see this same landmark on the topo sheet, it's an easy matter to pinpoint your position. Read the difference in degrees (between your heading and the landmark) and lay the protractor on the map with

corresponding degree line on your heading. Where the angle crosses is exactly where you are. It's really not as complicated as it sounds.

Aside from saving a search party a lot of trouble, there is a great satisfaction in heading out across unfamiliar terrain and ending up at the point you'd like to end up at. By not fearing the trail-less regions, the map-reading, compass-carrying hiker, hunter and fisherman will enjoy sport and adventure that is not available to others. Getting off the beaten paths will take you away from the candy wrapper trails that all too many of our "nature" walks have become.

I didn't attempt to get into the subtle and technical ramifications of map and compass work in the space of this column.

For 99 percent of the hiking situations that most of us will encounter, the topo map and the inexpensive compass will do the job well.

For more information regarding map reading and compass work take a look at the revised *Boy Scout Manual*. In every public library there is at least one volume on elementary surveying. These books invariably devote an entire chapter to map and compass reading.

### Final Reminder

One final reminder. Watch the publication date on topo maps carefully. Once, while following an unmarked trail in Centre County, I suddenly came across a four-lane highway. The expressway wasn't on the topo sheet and I thought I had gone crazy. The map was only two years old, but during that time a section of Interstate 80 had been constructed and they hadn't bothered to tell me about it. Some man-made structures may not be on your map when you come to them either. I hope you don't find many new ones. After all that's why we hit the wild trails . . . to avoid those man-made things.

Good hiking!





**IN THE ARCHERY-GOLF GAME**, bowmen marked their locations and permitted golfers to hole out before making shots on the green.

***Another Page in . . .***

## ***Archery-Golf***

**By Keith C. Schuyler**

*Photos From the Author*

**O**F ALL THE archery games that have ever been played, there is probably more confusion surrounding archery-golf than any other contest. It is questionable whether anybody really knows how to play it. There are no set rules although the National Field Archery Association has guidelines for archers only.

However, at the First Annual Twin Ponds Golf Arrow-Ball Tournament, held near Boyertown last year, rules of play made more sense than anything that has come up lately. For, no matter how you cut it, golfers simply cannot successfully compete against modern archers no matter how equitable the rules might seem. Although

the sponsors, Sherwood Schoch and Henry Fulmer, lay no claim to originality, their selection of procedures from past events was certainly a good one and might stand as a pattern for such contests.

Archery-golf is not new by any means, but the combination of archers and golfers in the contest was not part of the original game. Reference to the sport in the chronicles of archery are somewhat scanty.

However, it is frequently suspected that archery may have inspired the game of golf itself, for golf is very similar to the old archery game of *roving*, an informal shoot over various types of terrain at targets of oppor-

tunity. Records dating as far back as 1590 mention roving. Some wag has even claimed that golf was originated by a Scotchman who found it cheaper to substitute a crooked stick and a thistle ball for the bow and arrow, and cheaper to dig holes in the ground than to erect suitable target butts.

The earliest record I can find of an archery-golf game in America is 1906. Randolph Laughlin, a prominent attorney from St. Louis, imported bows, arrows and targets for the purpose. The game was played on his estate and, of course, rules were invented for the round.

Dr. Robert P. Elmer, who made a successful side career of perpetuating himself in the annals of archery, claimed a possible first in introducing golfers to the sport of archery-golf. In his book *Archery*, Dr. Elmer tells of his first experience with archery-golf

**A 16-INCH MAT WITH the 4-ring cut from a PAA target was used for archers to "hole in." This was a "one-putt" shot in the game.**



in the fall of 1910. He shot against Frederick J. Wendell, champion of St. David's Golf Club, near the doctor's home at Wayne, Pa. Each went an equal number of holes. Dr. Elmer shot at a four-inch disk of cardboard laid on the green. The story of the match was reported in *Forest and Stream* in the November, 1912, issue.

Dr. Elmer stated, "So far as I know this game is the first in America, but I am quite willing to acknowledge the priority of anyone else who may present a better claim."

### Early Tie

Another early reference is in the book *Modern Archery*, by Arthur W. Lambert, Jr. He reported that in 1925 he played with one A. W. Lantz against two professional archers on the course of the Bellerive Country Club. The event was well covered by newspaper cameramen and reporters. The match, which ended in a tie, was recorded in a half-page of a Sunday newspaper.

In the early days, archers and golfers were fairly evenly matched. This is no longer the case today, and this imbalance was corrected by including both archers and golfers on a team in the tournament at Twin Ponds.

An interesting sidelight in archery's history concerns a match in 1792 at Chalk Farm, in England, between a gunner and an archer. One Dr. Higgins used gun and ball against a Mr. Glenn, of the Toxophilite Society, who shot the bow and arrow. The contest was scored on the best of 21 shots at a target four feet in diameter set at a distance of 100 yards. The archer scored 15 hits and won the match, with the gun hitting the target only 12 times. It doesn't speak well for riflemen of that day. Although the bow would be no match against modern rifles, contemporary pistol shooters shy away from competition with archers.

Despite the fact that there are no hard and fast rules for the combination archery-golf, the National Field





**WHILE A SECOND ARCHER** and two golfers wait their turn, one bowman "tees off" on the No. 6 hole.

Archery Association has made certain recommendations, not necessarily tied to direct competition between archers and golfers, but for the game of archery-golf when played by bowmen alone. Four-inch balls of excelsior, thread-wrapped cotton or, lately, styrofoam have been used. It is recommended that these be placed on 20-inch stakes to represent the cup on the green of a golf course. In competition between the two sports, the same arrangement can be used. However, at the Twin Ponds Tournament mats were used to eliminate the hazard of arrows flying beyond the elevated balls. NFAA recommendation is to credit a hit when the arrow lands within an arrow's length of the target ball, or hole, or when the ball is knocked from the stake. At the tournament described here, use of the two center rings in the PAA target against a mat almost completely eliminated any danger from overshoots.

Rules were actually quite simple. Any bow or any arrow could be used, but there could be no switch in equipment during the tournament. The first arrow was released from the tee at the same spot that golfers make their initial drive. From then on to the green,

there was no difference except that, of course, each succeeding arrow was released with the archer standing so that his forward foot rested at the mark made by his last arrow. On the green, the distance could be stepped off but no actual measuring was permitted. No shot could be taken at the target until an arrow had actually landed on the green. The tiny mark made by an arrow shaft is considerably less than that caused by a back-spinning ball from a 9 iron, but an arrow does have a tendency to run under and through the grass roots.

#### **Holing Out**

Golfers were permitted to putt out the hole before the archers made their final try. The mat was then set against the flag with the target facing the archery contestant. If the first arrow from the green hit the bullseye, it counted as one stroke, and the archer was considered to have "holed out." If the outside ring of the target was hit, a penalty stroke was added to make it equal to two putts. If only the mat was hit, this counted a stroke. The archer then withdrew his arrow, stepped back two paces, and tried again. This meant that he then would

have a minimum of two strokes, or shots for the green. Again, the procedure was the same as though he was taking his initial green shot and a miss would require that he start all over again.

If the arrow completely missed the mat, the archer released his next arrow from the point at which the miss entered the green, with the target again facing him.

### **No Practical Handicap**

Because modern archery tackle has become so accurate in the hands of a skilled archer, it is unfair to match archers directly against golfers. There is no practical way of establishing handicaps since archery-golf is still in its aged infancy. Very few of those who participated in the Twin Ponds Tournament had ever shot the game before. Consequently, things were evened out quite satisfactorily by placing archers and golfers on the same team. And, since no one knew before the shoot with whom they would be teamed, no unfair advantage could be taken.

Obviously, the purpose behind this one was to provide interesting entertainment rather than to prove anything relative to skills of those participating. For example, to round out the teams, there were archers who switched to golf for the event.

In effect, although an attempt was made to be certain there would be a good attendance, there was a selected list of both good golfers and archers who received a special invitation. Basically, the idea behind this particular match was to introduce the game to both archers and golfers over a wide area. The experiment was to determine whether or not there would be enough interest to plan a competitive match in the future.

Those attending did not know who their golfing or archery teammate would be until selections were made just prior to the tournament.

After the last team came into the

clubhouse, all golfers' names were placed in a hat for a drawing to determine scores for two archers without golfing partners. Consequently, in the final lineup, the winning combinations were arrived at somewhat by chance.

An interesting consideration is posed for those who plan an archery-golf match in their local areas. If the local champion golfer and the local champion archer get together, it is unlikely that the outcome would be much of a contest except among the leading archers and golfers. The system used at Twin Ponds, of pairing the partners by chance rather than be prearrangement, would seem to provide a more equitable arrangement in what is chiefly just a fun shoot. It is unlikely that, in a formal match, contestants would have a chance to practice as a team at any other time than in the actual contest. Because the Twin Ponds Tournament was more in the nature of a trial exhibition, the method of selecting scores for those without golfing partners elicited more amusement than disappointment.

The "winning" foursome consisted of Stan Williams, Bloomsburg, and Lynn Sloan, Pottstown, holding up the archery half, and Greg Gottshall, Boyertown, and Henry Clary, Pottstown, providing the golf scores. Totals were: Williams, 59; Sloan, 64; Gottshall, 65; Clary, 79. The team total was 267.

Second place went to archers Sherwood Schoch, Boyertown, and Benny Cowan, Elmira, N. Y., and golfers Dave Burdan, Boyertown, and Ed Zebraski, Pottstown. The team total was 283.

Third place went to archers John Preston, Hendricks, and Steve Lieberman, Reading, and golfers Dennis Miller, Pottstown, and Al Neff, Boyertown. The foursome total was 287.

Individual honors for skill went to Joe Egner, Spring House, who shot a 65-pound bare bow and registered a 53 for the 18-hole course. Second place, at 55, was shared by Sherwood Schoch and Dave Kelly, of Carlisle.



Dave Barnes, Romansville, was third at 57. The spread between the high and low of the ten winning archers was but six points.

Boyertown golfer Greg Gottshall had by far the best golfing score, registering a 65. Second best, a 74, was shared by Pete Stulac and Ed Zebraski, both of Boyertown. Third place for individual honors was shared at 77 by Rick Jurbala, Berwick, and Warren Landes, Boyertown. Without Gottshall's under par 65, the spread between the golfers on the winning teams was only five strokes.

In all, 28 golfers and 28 archers took part, for a total of 56 participants. Another such tournament is planned for 1972. Joseph Higgins had held what were advertised as World Championship Archery Golf Tournaments at Albany, N. Y., but these events have been discontinued.

Evidence of the interest in the tournament was indicated by the caliber of golfers and archers who attended. Sherwood Schoch, one of the sponsors

of the event and a participant, is a former National Field Archery Champion. Steve Lieberman is current World Field Champion, having attained this honor in Wales in 1970. Present, too, was Bud Fowkes, president of Pennsylvania State Archery Association. Bob Stansfield, Horseheads, N. Y., represented the Professional Archers Association and Jim Stansfield, vice-president of the New York Field Archery Association, was on the scene. John Preston, the National Archery Association field champion, also was in attendance.

Henry Fulmer, Bear Archery Company representative, and Schoch, who represents the Kinsey Archery Company and Damon Howatt, were understandably well pleased with the turnout and hope that this activity will become even more popular in years to come.

Following the tournament, refreshments were provided by the sponsors at a picnic grove adjoining the golf course. The session gave those in at-

**HENRY FULMER, A CO-SPONSOR of the tournament, looks on as Dr. Ed Bowser and Earl Wise team up to start the match.**



tendance a chance to discuss the tournament and to make suggestions for the next one.

One possible problem noted during the contest was that on medium shots from the fairway arrows hit the green at a rather flat angle. Although the entry hole did no damage, it was feared that the entry path could possibly damage roots of grass on the well-kept greens. Also, some arrows did hit the flag staff in the cup.

It was decided that for the next tournament the archery target would be erected on a stand just off the edge of the green, but equal in distance from the cup. This would eliminate the necessity for shooting onto the green without having any appreciable effect on the shooting itself.

Golfers were as enthusiastic as archers in expressing their enjoyment in the combination sport. Indications were that both golfers and archers look forward to a repeat tournament.

A suggestion here would be that archery clubs also consider that original modification of archery-golf which harks back to the old days before field courses came in vogue.

In the early days of archery-golf, shooting was seldom done on a golf course. Rather, a simulated course was laid out in open fields where it was only necessary to erect the four-inch ball targets to provide the equivalent of a golfing range.

Although the average field course doesn't remotely resemble a golf course, it would be quite simple to play the same game using a regular field course butt as a backstop. Regular target stakes could be utilized for the known distances, or extra stakes could be placed for the event. Another stake, or marker, could be placed perhaps 10 yards from the butt to be used as a "putting" distance for those who fail to register a score from the "driving" distance. This would entail shooting, for the most part, no more than two arrows, as few would fail to score from the 10-yard distance if their first arrow missed. An almost infinite variety of ideas could be incorporated into this as a fun shoot and as something to create interest among those who are less proficient in the regular target events.

Whether only 18 targets, or the full 28 targets on the field range, were utilized, the tournament would move fast. Aside from the hazard of broken arrows and nocks if the target became too crowded, it would be necessary to restrict shooters to any particular number on a target.

Such activity might encourage the local club to get together with members of the local country club for a match similar to that held at Twin Ponds. In any event, it is a way to make archery more interesting, and that's always good.

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## **New Correspondence Course on Wildlife Resources**

"Wildlife Resources and Natural Environment" is the title of a new correspondence course available from Penn State University. Written by Robert G. Wingard, Associate Professor of Wildlife Management Extension, the course deals in a non-technical manner with the importance of wildlife in our ecology and the problems associated with its management and preservation in our rapidly changing environment. The first five lessons cover the fundamentals of wildlife management, the second five show how to apply the principles outlined, and the final two discuss wildlife's future. Cost of the course is \$5.05 (payable to the Pennsylvania State University), from Wildlife, Box 5000, University Park, Pa. 16802.



# Pennsylvania Scope Mounts

By Don Lewis  
Photos by Helen Lewis



**DARREL LEWIS TRIES OUT the S&K Insta-Mount on M1 Garand with Weaver V7 scope. It worked well.**

**W**HEN I CRAWLED into bed at precisely 2:15 a.m. on the Saturday night — or morning — before the opening of deer season ten years back, I envisioned staying in bed until 9 o'clock. I would have gladly slept longer, but official duties at our church required my presence.

It seemed that I had just closed my eyes when I was rudely awakened. Helen was shaking me until the bed fairly rattled, informing me that I was wanted on the phone. My temper flared when my strained eyes read the time at just a minute before 7.

"Who wants me at this unearthly hour?" I demanded with anger in my voice.

"I don't know. He said it was an emergency and that he has to talk with you."

"Tell him I don't run an ambulance service," I said wearily, and fell back into a comfortable position. However,

Helen's insistence won and I got up.

The man on the phone must have detected an acid tone in my voice, as he sputtered trying to apologize for calling so early. His reason was that he wanted to get me before I would be swamped with work the day before deer season. I must have taken the wind out of his sails when I told him I wouldn't be open.

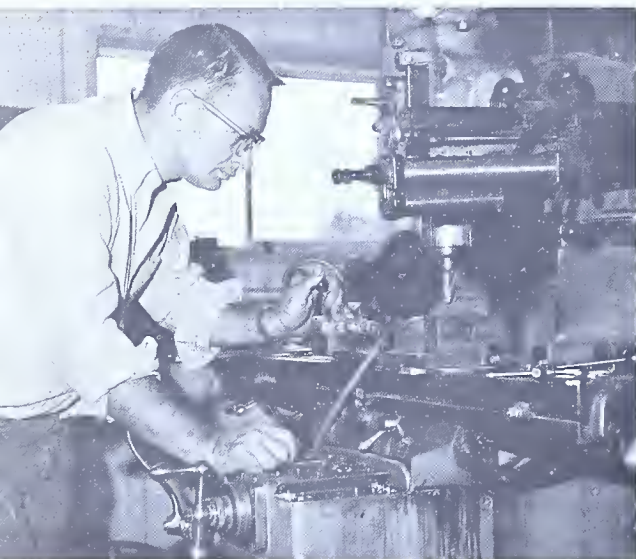
"You wouldn't take a look at my scope to see what's wrong with it," he asked rather sadly. "It wouldn't take over a few minutes."

"No, not today. I've been working steadily in my shop for many weeks and I'm tired. I don't like to say this, but there's been ample time for you to get your scope mounted by me or two or three other local gunsmiths."

"Oh, I had that done, but I can't get the rifle sighted in. My brother and I have fired two full boxes of shells without getting near the bulls-

eye. We even tried it at close range, but there isn't enough windage adjustment in the scope to bring the bullet on zero. We figured you could spot the problem immediately and get the rifle to shoot as it should."

Tired as I was, I was getting interested and curious about his outfit.



**SID HAIGHT** at work in the **S&K scope mount shop**, one of three top-grade mount manufacturers in Pennsylvania. **S&K specializes in mounts for military rifles.**

During the years that I had sighted in rifles, I had seen only a couple that I couldn't get zeroed. Still, I stuck to my guns and suggested what I thought was a sure-proof method of getting out of seeing the rifle. "Why don't you take the rifle back to the man who drilled and tapped it and have him find the problem?"

This suggestion hit a dead snag. The caller freely admitted he had been steered to a gunsmith who worked for practically nothing. He thought a dollar saved was a dollar earned and that mounting a scope could not present that much of a problem. To make the bargain price seem better, the gunsmith furnished the mount setup for only four dollars extra. This was a far cry from some of the prices he had been quoted.

When he went for the rifle, the gun-

smith had not zeroed it in by firing, but told him that he had aligned it perfectly with a device that couldn't fail and did a better job than putting the rifle on a benchrest. When he took his rifle to a local range, he discovered the rifle wouldn't come to zero, no matter what he did.

I agreed to take a look at the rifle before leaving for church. He and his brother arrived in record time.

### **Base Off Center**

The minute I saw the rifle, I knew the scope was mounted incorrectly. I could see by just looking that the rear base was off center. I disassembled the rifle and put it in the scope drilling jig. To my surprise the rear holes were centered but the front ones were not. I knew a thin brass shim should correct the front base problem, but when I checked to see if the rear base was level, I found the problem. Not only was the stamped rear base not contoured properly, but the radius of the rear part of the receiver was not the same as the radius of the front. When I leveled the bore in the drilling jig and made certain the bottom rails of the action were square, I found that the rear base was a full 1/32 of an inch from being level across from the front base. To have a good scope mounting job, the bases must be plumb vertically and level horizontally.

Time was a factor with me that morning, and I made a crude set of shims to level the rear base. With a collimator, I showed the two brothers the radical change that took place when the bases were level. After getting the metering wheels on center, I remounted the scope and aligned it with the collimator. To prove that the







**RAISED RINGS, LEFT, from S&K, permit use of iron sights beneath scope, by aiming through hole. Above, various steps in the manufacture of the split rings which bind scope to base.**

scope was now mounted correctly, I fired it from my 100-yard benchrest and zeroed it in with only six shots.

I assured the owner that my job was only a temporary measure. A special milled base of the proper height would be needed to make the job permanent. When the two men left, I had a feeling that it would be a long time until they went bargain hunting again.

The base that I suggested would take a gunsmith or a machinist quite some time to make. Shooters and hunters today are fortunate to have this special service available from Sidney Haight, Jr., of the S. & K. Mount Company in Pittsfield, Pa. When I visited Mr. Haight last summer, he said he welcomes opportunities to help with these special problems. He is well qualified to make special bases, as his full-time work is the manufacture of the excellent S. & K. scope mount.

Pennsylvania rifle buffs are fortunate in having three exceptionally fine scope mount makers in their own state. The other two are Kuharsky Bros., Inc., 2425 West 12th Street, Erie, and Paul Jaeger, Inc., 211 Leedom Street, Jenkintown. From personal experience in working with all of these brands, I feel each is of top quality and workmanship.

These mounts don't come cheap, and with so many inexpensive scope rings and bases flooding the store

shelves today, I can readily understand why many people think that mounts costing up to \$40 represent a large profit. What isn't known is that turning out high quality machined bases and scope rings requires skill, expensive equipment, and a strong desire for perfection. Making a simple base requires up to 10 operations, and more than 30 are needed to turn out a perfectly matched set of scope rings. Even with all the precision milling and boring machines that I watched operate at S. & K., a lot of time was needed to turn out the finished product. Perhaps 20 bases could be stamped out of poor grade aluminum in the same time it takes to mill one out of high tensile strength steel. Believe me, it's not all profit.

#### **Mounts for Military Rifles**

Although S. & K. makes bases and rings for most rifles, the firm's specialty is its mounts for ex-military rifles. At present, S. & K. makes mounts for 13 ex-military models, such as the Springfield, Mauser, 30-cal. Carbine, M1 Garand, SMLE, etc. Many other manufacturers make mounts for these models too, but the unique aspect of the S. & K. design is that no drilling or tapping is required for installation. In fact, in most cases, the rifle's own holes will be used. I made a beautiful job on an M1 in just a few min-

utes. The only tools needed were a screwdriver and the Allen wrenches that came with the mount. This mount is offset to the left to clear ejected shells and clip. Sid Haight said the Garand mount was the only offset he made in his Insta-mount series.

There have been many heated discussions between gun owners and gunsmiths concerning the relative merits of steel and aluminum. As I see it, it really doesn't matter, if high grade materials are used. I feel that steel is stronger, but when 2017 or 2024 aircraft aluminum is used, there would be little difference. Problems stem from the fact that many bargain mount setups are made from a poor grade of aluminum. I use extreme care in tightening the ring screws on most imported rings, but the high grade aluminum rings made by Kuharsky Bros. never gave any problems.

A friend of mine who thought any type of mount would hold his scope fired a box of ammo in vain before he discovered the ring screws had come loose. His efforts to tighten them resulted in stripping the threads from three holes. His original investment for the inexpensive mounts plus the price of the shells would have gone a

### Letters . . .

*Shooters for some reason—perhaps because they're involved in an interesting subject—tend to be letter writers. Many of them write to gun columnists, either requesting information, giving it, or just because they want to talk about their pet guns. I enjoy such correspondence and answer as much of it as possible. But sometimes there just isn't enough time to reply to all mail. If you didn't get an answer to a letter, this is the reason.—D.L.*

long way toward buying a good mount.

I think the most common problem incurred with the stamped out versions is scope slippage. This is especially true with Magnums, and I've had to resort to a special double-coated tape made by the 3M Company in St. Paul, Minn., to hold the scope securely. I recall one man who complained that his scope got farther away from his eye every time he fired, and in fact it did. Loose scopes always slide forward from rifle recoil — or rather, the gun kicks back while they stand still due to inertia.

The reason for scope slippage is oversized holes in the rings. I have tightened some ring screws until both halves were drawn firmly together, but the scope could still be moved by hand. The diameter of most American scope tubes where the rings fit is one inch, although it's not uncommon to make scopes that run many thousandths larger. Sid Haight told me that he holds the tolerances of his scope ring hole to 1.003 or just slightly over one inch. When the ring is later sawed in two pieces, this close tolerance permits a very tight fit around the scope.

Of all the intricate operations in making a high quality scope mount, boring the holes in the rings is the most delicate. There is no room for error, and the hole must be in the



**KUHARSKY BROS.** mount, shown with B&L scope on fancy M70 Winchester, is quick detachable and features both windage and elevation adjustments in the base.



exact center and square with the sides of the rings. S. & K. maintains a tolerance of no more than one thousandth of an inch in any direction.

Most scope makers warn the gunsmith to install the top half of each scope ring exactly as it was removed. In other words, don't mix up the two halves and don't turn the top half around. I usually mark the side of the rings with a pencil or a crayon before removing the screws. S. & K. solves that little nuisance by cutting a tiny line on one side of the scope ring. The gunsmith must still keep the right top with its respective bottom ring, but the little line on the inside will show him the proper position for the two halves.

There is usually no loss in accuracy if the rings are assembled improperly, but if the two screw holes don't align exactly, there could be a bind or stress point in the scope that might cause trouble. The fact that the mount maker includes this warning in the instructions has led to the belief that if the halves are installed incorrectly, there will be a definite loss in accuracy. Actually, how the ring screws are tightened is more important than whether the screw holes are in exact alignment.

### Jaeger QD Mount

Paul Jaeger is a widely known gunsmith who has been turning out superb custom rifles, stocks, mounts, and triggers for years. His specialty is the "quick detachable" side mount. I have never been a strong advocate for any type of swivel, swing-over or quick detachable mount, but I have to admit that the Jaeger method is hard to surpass.

In this setup, a dovetailed base is securely attached to the side of the receiver. Its size and position are such that it does not interfere with the use of iron sights when the scope is removed. The detachable ring unit that holds the scope slides onto the dovetailed base and is locked into position.

Precise machining assures a return to zero after removal and replacement. A stop lock, operated by a push button, locates the mount in the proper position on the base. The mount is then locked to the base by a lever operated clamp. A half turn of the lever



**JAEGER QD SIDE MOUNT** has long been recognized as one of the world's best. Its workmanship is a fitting complement to any high-grade rifle.

disengages the clamp and permits the mount to slide off the base.

The workmanship in the Jaeger mount is superb, and I would have no hesitation about using the Jaeger mount on a big game rifle. There is no question that the scope can be removed or installed on the base in a matter of seconds. There is no resemblance between the Jaeger quick detachable mount and some spring or clip types.

My use of the Kuharsky product has been mostly with the Bausch and Lomb scope, although Kuharsky Bros. makes rings and bases for other scopes. All of the Kuharsky mounts I've worked with were made of black anodized aluminum alloy, but I could see nothing that would deter me from using them on my own rifles.

The idea behind the Bausch & Lomb mount was to make it possible for a hunter with several rifles to own just one scope and have the special B & L mount on each rifle. Since all the

windage and elevation adjustments were in the mount, there was no need for the scope to have windage or elevation in it. Once a mount was set and locked for a particular distance and load, the owner could remove the scope and use it on another rifle. When it was installed back on the first rifle, it would be back on zero there. A plunger type clamp ring assembly that fitted on the scope made it possible for the scope to be removed and installed in a few seconds.

The old style plunger type clamp ring was later replaced with the Kuharsky lock type clamp. Instead of pushing back on the plunger to re-

move the scope, a star lock nut must be removed from the new clamp before the scope can be removed. This takes longer, but, in my opinion, it is a definite improvement over the plunger type clamp.

Pennsylvanians are indeed lucky to have three top quality scope mount manufacturers in our state. Whether the need be an Insta-mount for an ex-military carbine, a quick detachable mount for a Model 70 Winchester, or a new setup for the fine Bausch & Lomb scope, Pennsylvanians do not have to go beyond the borders of the Keystone State to find top quality merchandise.

### **And That's Really Something**

The badger holds claim to being the only animal with a white stripe extending from its nose to the back of its head.

## **Looking Backward . . .**

Squirrels seem to be exceedingly numerous in every section of the country this fall. The oldest inhabitant in these diggings knoweth not the day when hunters brought in such bags of them as they do now. Two and three dozen are an ordinary days work for a tyro at the business. But Burgoon's Gap will bear no comparison with the Western country!

At a squirrel hunt near the city of Detroit, about a fortnight ago, no less than 3,360 were killed. At other places like wholesale slaughters have been made. The Buffalo Commercial Advertiser says: For some weeks past the woods in the neighborhood of Fort Erie, across the river, have literally swarmed with them. Within the past week or two they have crossed the Niagra to this side in immense numbers. The rapidity & width of the river have, of course, proved fatal to many of them, but little armies of them have nevertheless succeeded in gaining our shore, whence they pushed off South. On the Allegheny river, we are told, they are so numerous that it is not deemed worth while to waste powder and shot in killing them. Those wishing a squirrel pie stand on the banks of the stream and knock the little "varmint" on the head with a stick as they swim across. The apparent general emigration of the squirrels to the South is held by the Indians, and others knowing in such matters, to betoken a hard winter. (Hollidaysburg Register & Huntingdon County Inquirer, Nov. 2, 1842)



# Pennsylvania Game Commission Directory

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ROBERT S. LICHTENBERGER ..... *Deputy Executive Director*  
HARVEY A. ROBERTS ..... *Deputy Executive Director*  
EDWARD T. DURKIN ..... *Comptroller*

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SOUTHWEST DIVISION—G. L. Norris, Supervisor, 339 W. Main St., Ligonier 15658.

Phone: A.C. 412 238-9523 or 238-9524

Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington, Westmoreland.

NORTHCENTRAL DIVISION—Raymond H. Morningstar, Supervisor, P. O. Box 38, Jersey Shore 17740. Phone: A.C. 717 398-4744

Cameron, Centre, Clearfield, Clinton, Elk, Lycoming, McKean, Potter, Tioga, Union.

SOUTHCENTRAL DIVISION—William A. Hodge, Supervisor, P. O. Box 537, Huntingdon 16652. Phone: A.C. 814 643-1831.

Adams, Bedford, Blair, Cumberland, Franklin, Fulton, Huntingdon, Juniata, Mifflin, Perry, Snyder.

NORTHEAST DIVISION—Norbert J. Molski, Supervisor, Box 220, Dallas 18612.

Phone: A.C. 717 675-1143 or 675-1144

Bradford, Carbon, Columbia, Lackawanna, Luzerne, Monroe, Montour, Northumberland, Pike, Sullivan, Susquehanna, Wayne, Wyoming.

SOUTHEAST DIVISION—Paul Glenny, Supervisor, R. D. 2, Reading 19605.

Phone: A.C. 215 926-6071

Berks, Bucks, Chester, Dauphin, Delaware, Lancaster, Lebanon, Lehigh, Montgomery, Northampton, Philadelphia, Schuylkill, York.

## GAME FARMS

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WESTERN GAME FARM—G. Russell Enlow, Superintendent, R. D. 1, Cambridge Springs 16403. Phone: A.C. 814 398-2212

LOYALSOCK GAME FARM—Jack N. Anderson, Superintendent, R. D. 2, Montoursville 17754. Phone: A.C. 717 435-2500

STATE WILD TURKEY FARM—Eugene P. Nelson, Superintendent, Proctor Star Route, Williamsport 17701. Phone: A.C. 717 478-2252

SOUTHWEST GAME FARM—Clarence Wilkinson, Superintendent, Box 1, Distant 16223. Phone: A.C. 814 275-2515

STATE WILD WATERFOWL FARM—Henry R. Pratt, Superintendent, R. D. 4, Meadville 16335. Phone: A.C. 814 382-6845.

## HOWARD NURSERY

SUPERINTENDENT—George Weller, R. D. 2, Howard 16841. Phone: A.C. 814 355-4434

## TRAINING SCHOOL

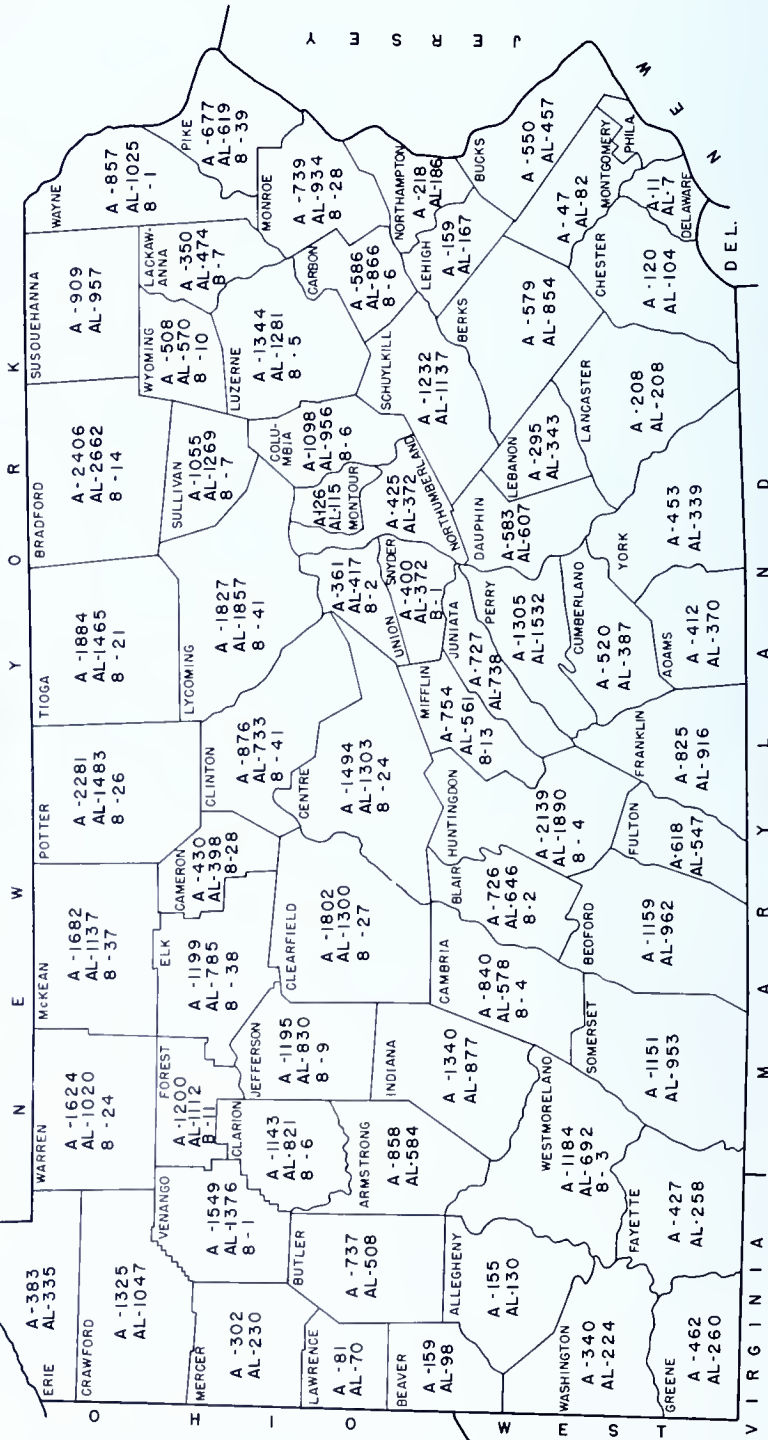
ROSS LEFFLER SCHOOL OF CONSERVATION—Donald E. Miller, Superintendent, R. D. 1, Brookway 15824. Phone: A.C. 814 265-0456



1971

# DEER & BEAR HARVEST

PENNSYLVANIA GAME COMMISSION  
HARRISBURG



ANTLERED DEER  
(SYMBOL-A)

ANTLERLESS DEER  
(SYMBOL-AL)

REGULAR SEASON..... 54,331  
COUNTY UNKNOWN..... 191  
ARCHERY SEASON..... 1,080  
TOTAL..... 55,602

Grand total BEAR kill..... 488  
(SYMBOL-8)

Grand total DEER kill..... 104,227



P38.34  
1.6  
1972  
No 6

# PENNSYLVANIA GAME NEWS

JUNE 1972

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### COVER PAINTING BY J. M. ROEVER

The white-tailed deer is a highly prolific creature. Except for the first breeding, when a single fawn is common, does often produce twins, sometimes triplets or quadruplets. The beginning of June is the peak of the fawning season in Pennsylvania, and during the summer it is not unusual to see the beautifully spotted youngsters in the fields or woods. Too often it is believed that a fawn has been abandoned by its mother, and the little animal is caught and taken home. Never take a fawn out of the woods! The mother almost invariably is nearby. She can take care of her offspring, but you can't, so leave these animals in the woods where they belong.

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## **Alice and Her Friends**

**M**ANY READERS WILL REMEMBER the letter Miss Alice Herrington, president of Friends of Animals, Inc., wrote me (August, 1971, *GAME NEWS*), expressing her opinion that hunters are "paranoid miserable cowards." A lot of you took time to write her concerning her attitude and also that of a friend of hers, Marta Orbach, who said she was happy when 27 hunters mistook each other for deer and were killed. Mrs. Orbach subsequently sent me a personal letter in which she wrote, in part, ". . . to keep yourself from starving to death during the winter months, why don't you do us *all* a favor and shoot yourself?"

I mention all this because these two ladies again are in the news and I thought you might be interested in their activities if they have so far escaped your attention.

The May issue of *FIELD & STREAM* contains a lengthy article by Margaret Nichols on Miss Herrington and her organization. The most interesting part of it concerns finances. It indicates that during 1971 Friends of Animals collected \$468,166 from contributions and other income. Of this, \$333,604 went for charitable purposes, \$97,315 for public information, and \$101,002 for administrative costs, including a salary of \$19,267 for Miss Herrington. No money, apparently, went for conservation or wildlife management—a fact which should interest past contributors who thought of themselves as friends of animals but turned out to be friends of Miss Herrington. According to the report, most of the organization's expenditures actually went to veterinarians to redeem spaying certificates. That's really something to brag about—spaying cats. And this is the bunch that loudly hangs the label "assassins unlimited" on the internationally acclaimed National Wildlife Federation, Wildlife Society, World Wildlife Fund, International Association of Game, Fish and Conservation Commissioners, and other reputable groups.

As for Mrs. Orbach, she is mentioned prominently in the April 17 issue of *TIME*, pp. 21-22. She gained this recognition through her close friendship with a gentleman named Joseph Gallo, better known as "Crazy Joe" Gallo and called by *TIME* ". . . one of New York's most feared Mafiosi." Mrs. Orbach prefers to call him "Joey." Joey was "a great person," in her opinion, "brilliant, absolutely charming." (She spoke in the past tense because Mr. Gallo is with us no more, having been gunned down, apparently by a paid assassin, in a New York City restaurant.) "Joey had an intense sense of destiny," Mrs. Orbach is further quoted. "If he was truly marked for dying, this old-fashioned way—in style—would have been a point of honor to him." Some style.

Following the assassin's work, Gallo's bodyguard and another pal triggered off some 20 shots (though it's hard to see how this is possible, in view of New York's Sullivan Law which effectively prevents private ownership of handguns), but as Jimmy Breslin observed, that gang couldn't shoot straight, and the killer ambled off into the pre-dawn darkness.

At any rate, with this deeper insight into Mrs. O's character, it's much easier to understand why she's glad to hear when 20-some hunters are shot accidentally. She just sees things differently than we do around here where the old-fashioned way of dying is in bed, of old age. To her, being shot is a matter of style.—*Bob Bell*







*It's Been a Long Time Since This Hunt,  
but I'll Never Forget . . .*

## *The Slab Pile Fox*

By Bob Carter

**T**HE JEEP'S stubby wiper blades flicked at fine white snowflakes pelting its windshield. We were driving a winding, frozen reddog road into fox hunting territory in a February squall. It was a half hour before daylight, but we were young and eager. Besides, Harold Swagler, our benefactor this day—foxhounds and the Jeep ride to a place to use them—had some Hereford steers to hay down the road. So we had gone by his schedule.

I was 17 that morning, a skinny high school senior who would much rather hunt than anything, except maybe eat. My buddy was John Hetherington—an even skinnier 16-year-old with a reputation for staying in the field through blizzards and downpours.

Harold's handsome pair of foxhounds, Bo and Lady, stood, lurching with every bump and curve, in the rear of the 4WD monster. We shared the front with Harold, a hard-charging young farmer who loved fox hunting and Mail Pouch tobacco. The Model 12 Winchester he carried was one of the most scarred I've ever seen. Harold, 235 plus coveralls and parka, left us little room.

John's dog suffered an equal squeezing in the back. A slight but wiry liver-and-white beagle, Plu looked like anything but a foxhound. With a pained expression, he clung to his perch a rusty set of tire chains in the rear corner, while the haunches of the bigger dogs flapped him this way and that when the Jeep bounced.

Plu, a tough nut, was the sole survivor of an otherwise stillborn litter. He lived life to the hilt.

"Wish I could go with you, boys," Harold said. "But this is my egg route day. If you end up tonight with both dogs, give 'em some feed from the barn entry before you go home."

"We will," I said. "Let us out near the slab pile, okay?"

"All right, but you boys are wasting your time runnin' that fox. He'll loop all day and never be in sight."

"We'll get him in sight this time. I got a plan."

"Plan all you want. I've had that old dog fox up five or six times the last two years. Most I see is a flash of red two gullies away. He manages to stay downwind of anyone who carries a gun, or out of reach of anything that might take a snap at him."

John said, "I have a secret weapon. I'm not going to let myself have any scent today."

### **Daylight Coming Fast**

We headed into the sweeping curve near the slab pile. Harold let up on the gas and the grade slowed the Jeep. He stopped with the usual jerk and we buckled our knees so we could bail out of the tiny high doors. Daylight was coming fast and the snow had dropped to a few flurries. The wind rattled some roadside scrub oak leaves, but it too was fading.

Our dogs struggled through the rear flaps of the vehicle and dropped stiffly to the ground. The few roadside weeds that winter had let stand became instant curiosity objects—the subject of sniff-sniffs and leg lifts.

"See ya, boys," Harold yelled, and was off with a terrible wrenching of gears.

My eyes were watering from the

sudden exposure to 15-degree cold, but by squinting and curving my back into the wind I could see enough through the gloom to make out the black mystery of the old slab pile—a giant hulk of wildly thatched sawmill trash. The 30-foot-high pile covered a quarter-acre in the heart of a deep ravine starting 200 yards from our road.

An impressive fortress on its own, the giant slab pile was also guarded by a fierce net of blackberry briars and alders. A man with a machete could take awhile just to penetrate to the slab pile.

### Slices of Logs

The slabs were slices of logs the long-gone mill had pared off, squaring logs to be cut to rough planks. Flat on one side, the other was rounded with bark on it.

Sawyers who took out the timber liked to set up their mills at the head of a hollow. That way they could just heave slabs off the end of the mill floor into a ready made pit.

Mounded by the ton, these piles made great havens for mice, rabbits and groundhogs. Foxes loved them, too, if they were well drained and not bothered by people—a good place to nab a quick mouse lunch on the way out to the office.

If we were to be lucky enough to work out on the slab pile rascal, he'd have opted to do his daytime napping in a nearby stump hollow or brush-pile, rather than in the den. Reds seemed to like to stay above ground during winter days, unless it rained or blew superhard.

Like all mature reds, this fox knew every item in the square mile around the slab pile, plus having an intimate memory file of recent hunting adventures in the area. He knew where the rabbits he'd flubbed before might be nailed one night soon on the second, third or eighth try. He knew where he was safe and where he might encounter hunters or trappers.

He was scared to death of traps, having seen several foxes grabbed fast by them, to be represented the next day by a bloody seuff in the leaves or snow. When he smelled steel and man together under the ground cover, he swung away.

We knew this fox liked to run before dogs. He'd take off on a romp around hills and hollows when he could have beelined to the slab pile or another convenient den. Several times we squandered most of the hours of a hunting day only to lose the trail—or have him streak unseen for the pile when we were out of position. That was always *finis* for the day. The dogs would poke noses into the briars and bay, then sit to lick sore pads and grumble a bit more.

"Let's see if he's out," I said, and we started on a big circle of the slab pile area with the dogs just tagging along. We found his night-before exit trail right away—upstream along the tiny creek, pieking out a rabbit run that threaded the alders. It was just a spaced series of dimples on the face of this morning's squall snow.

We cut that track and went on, bending across the oak-clad benches in the big woods behind the pile. Then we swung hard back toward the creek and our start point. Rabbits had been out bark nibbling, but no fox return was recorded there.

"Let's try to get him up," said John, "then just head back here and stick to the slab pile area until he comes in."

"Okay," I said, but with little enthusiasm. The idea of standing all day in even cool temperature was not my concept of pure fun. With no fat and with drafty boots, I was not much of a stander.

John, on the other hand, would stand hours on end in the cold, waiting out a potential score—thin face a mottled purple, back hunched and hands jammed deep into his parka pockets. He was a sniper; I fancied myself a commando.

We took off in the general direction



followed by our friend the evening before.

"He might be in the broomsage right over the hill," John said.

We crossed the road and headed up a deep wooded hollow that topped out in the broomsage field in mind. There were sheep in his hollow, so little cover and less wildlife.

We hit the field and stepped into orange, waist-high grass. The wind was sharp, but kneeling, I could see that the dense clumps of grass made nice daytime cover for a fox full of mouse steaks.

The dogs suddenly got interested. They remembered that this field was hot stuff for fox bouncing. Bo ripped off a couple experimental whoops just to clear his sinuses and Lady took to quartering the cover in a fast rocking lope, nose at half mast, skimming for a trail or a strong whiff of close, pungent fox.

Plu ambled behind me, looking bored. That dog knew how to save himself for the big things.

Getting on to the face of the hillside, we could see broad spreads of orange grass, backed by a snow-blanketed alfalfa field. I was carrying a 22 Hornet proudly loaded with my own 43-grain spitzer production and capped with a 4X scope.

I scanned the horizon for erupting shapes, caught none and looked out of the scope just in time to see our red friend go flipping out into the alfalfa field several hundred yards away. He stopped abruptly, wheeled and sat down in the center of the field to watch us.

"Hut! Hut!" I yelled, and swept my arm toward the fox for the dogs' benefit.

Lady caught his takeoff with her weak dog eyes and put two and two together in a hurry. "Owh! Owh! Owh!" she said, and aimed for the fox. In a second, Bo joined and a brief sight chase swept them out of hearing. Plu rocked along way behind, not yet in any big rush.

"Let's get to the slab pile," said John.

"You go ahead. I'll spend some time trying to head him, then meet you there when he gets back in that territory." I was not about to shiver on a stump the rest of the day.

"Okay," said John and we split—not to talk again until afternoon.

Boy, did that fox run! Time after time I picked a hollow or fencerow to ambush. Only a couple glimpses rewarded my strategy and hustle. It settled down to an all-day frolic for woofing mutts and a flirty fox.

About 1 p.m., I saw the dogs cross a corn stubble field way below and go through a farmer's pigpen. The well-fertilized grass was six feet high there and our fox had perhaps idled a few minutes to watch the farmer's wife dump corn ears into the hogs a few feet from his cover spot.

I could see the lady waving her arms at the dogs and in a few seconds her voice floated up to me—a displeased voice (them dogs fussing up the hogs).

I dug a flattened bologna sandwich from my game bag, dusted a few grouse feathers off the waxed paper and unfurled lunch. Exceptionally good. Why was I always too lazy to make four or five?

### Here Came the Fox!

Whoops! Here came the fox, right out in the open, bearing up my fence-row. His tongue was out a bit, but he was just warm, not tired yet and enjoying his route.

I had the Hornet at chest level and was prepared for the passing shot if he didn't break stride.

An ungrabbed hay bale lay snow-capped in the field 80 yards out. Almost as an afterthought, the handsome fox tilted from his course and bounded featherlight up on the bale. Mincing his feet, he gingerly half sat and turned his back to me to watch the oncoming hounds, still several hundred yards below.

Plu was now ahead of the foxhounds, running in a choppy, flat lope, making not a sound. Plu was no dummy. He had discovered he got close to a lot of foxes by running absolutely silent. And he got ahead of a lot of dogs who thought they were leading a chase on which he'd cut in ahead.

Plu was getting interested now. The tracks had been smoking and he'd seen enough fox during the day to whet his appetite. I had seen a couple not-as-smart foxes take fatal ripostes from Plu baby when they failed to check their rears for a few minutes. He had a closing rush that got many foot pounds of energy and a ferocious crunch of beagle jaws into the game.

Plu hadn't always won these shots easily, of course. His muzzle wore a few black scars and his ears were a bit motheaten. But he loved it all.

Smiling to myself at Plu's technique, I wasted little time. The fox's back was turned, I reminded myself, so get the gun up, scope on him, safety off and. . . .

The faint click of my cheap Horner's safety sprung that fox airborne like he'd caught a hot needle. He didn't bother to look for the sound source. He just lit flat out, boring for cover. Desperately, I swung with him and caught a red flow in the scope.



*Bam! Behind. Bam!* He angled sharply but held stride. Then he was gone and here came Plu, blood in his eye and ready for fox action.

He saw me but swept by, watching for the crumpled fox. Nothing. Quick the savvy little dog circled, slammed on the brakes right by me and looked up inquiringly. I said in that blank voice of the hunter who just blew it for the dog—"Go get 'em, Plu!"

Plu wasted no time with criticism, but turned and found the trail, yards ahead of the two foxhounds, excited now, and really turning on walloping voices that raise the hackles on hound hunters.

The pack was gone in moments and I felt a solid letdown. Should have had him.

Frightened by his near goof, the red was barreling for the slab pile area. John was on deck now, somewhere down there. I spent a moment visualizing him. He'd be hearing the dog voices now, suddenly breaking over the hill above him after hours of silence.

The waiting game was to be rewarded. He'd wiggle his stiff fingers inside their red cloth gloves, hunch his shoulders a few times to get muscles alert.

Actually, John was in a great spot. He was just up the hollow from the slab pile and had spent extra time getting positioned near a big walnut tree. He could see down and over the entire top and side surfaces of the pile. The fox usually entered from there because he could slip through the maze of briars and alders.

But the dogs were coming head-on, right up the short hollow from the road to the face of the slab pile. He was on the wrong side, John thought in agony. He'd never see him. Sure enough, the hound voices rammed into the thicket somewhere out of his vision, and Bo set up a booming complaint.

In the slab pile. Doggone him.



John dropped his arms in disgust and, from behind, the lightly racing figure that had just completed a silent loop around the slab pile after approaching it from the creek, zipped under his tree and went for the tangle.

Too late John got his feet straightened out and the 12 gauge double back up. Too late, he was thinking frantically, and too soon he jerked off the shot.

The load of 2s slammed up snow, bark and dirt a couple feet to the right of the fox. He flipped over the edge. Silence.

### A Smoking Hull

John pulled the smoking hull from his shotgun flung it viciously at the slab pile, muttering to himself. Whisk, whisk. By went Plu, giving it the old college try.

He'd been two seconds behind that fox, running quiet, trying to work the double-cross on the double-crosser.

Flip. Over the side went Plu and things got quiet again. Plu had entered the slab pile!

Halfway down the hill I heard the boom. Boom once usually means good things for hunters. We would see.

I found John atop the slab pile, fighting off headhigh briars and trying to see over the edge.

"Plu's in there," he said. "Listen."

Dog and fox were really turning on the growls and snarls down under. It was a tie for dramatics, volume and frequency. Plus, it was a neat echo chamber. Bo and Lady were having none of that. They stopped at the road and revisited the morning's scent posts.

"We gotta get him out," John said.

"Why did you miss?" I said.

"Why did you?" John said.

I started the tedious weave to join John on the slab pile. Man, those blackberry stands can give a mean jab, even through longies.

It was 4:30 by the time we'd made any headway tearing into the face of the pile.



**THE FAINT CLICK** of my cheap Hornet's safety sprung that fox airborne like he'd caught a hot needle. He didn't bother to look around for the sound source. He just lit flat out. . . .

Every slab was tied into seven other slabs. The way to make progress was remove the top of the face a layer at a time!

Plu and friend turned on a round every half hour or so down under.

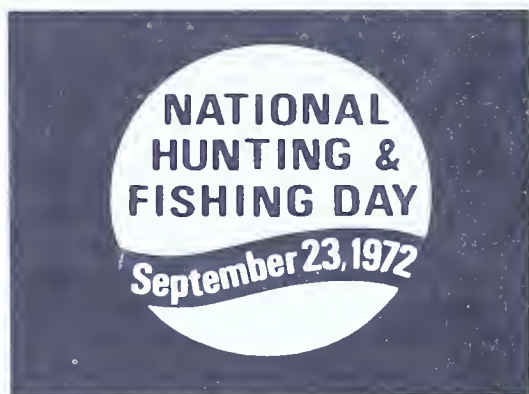
"Huyh, Plu," John said often but was studiously ignored.

"Maybe his collar's caught," John said, after awhile.

"Maybe he's a dumbhead," I said.

Dark hit and we built a slab fire in our new slab pile emerging just downhill from the original, so we could see to tear our fingers up on more stubborn slabs. The dog and fox fell silent.

Once in awhile we'd hear the dog, making just a low growl. No extra energy. No fox noise.



"I think he's finished the fox," John said, panting in the short tunnel we'd made.

We had angled down gradually to approximately a point opposite the polar icecap. The slabs went on forever, a beautiful meshwork of connecting recesses.

"Maybe I hit him on the run," I said.

"Sure," John said.

Theory grew in the absence of evidence.

An hour more we dug and any energy from the bologna sandwich was long gone. The foxhounds were too. They were practical mutts and had left for home, not caring to miss dinner.

"Please, Plu, come on," John holled into the matrix. The slabs were tighter knit now and we struggled to remove just the few that seemed to lead up deep and near the occasional dog sounds.

"The fox has got to be dead," John said. "No sound for two hours."

"I agree."

Plu had a high batting average on sticking with foxes until they suffered coronary arrest by some means or another.

The rising moon gave us a little light.

It was eight o'clock. We'd dig and tear another half hour then go home for dinner and some cutting tools, we'd decided. One large flat slab blocked our perspiring progress toward the earth's molten center, where

Plu huddled, consorting with trolls and blind cave lizards. Together we heaved. It wrung a frenzy of barking from our out-of-sight beagle.

"Pull," John said.

"We're going to score now."

Heave. Heave.

With an abrupt slip the huge flat slab came loose and we tumbled back on each other in a flurry of dust and bark.

Here came Plu scrambling out of the pit we had revealed.

And there, from beside my shoulder, out of a side recess, squirted that red fox, rested and ready for the one instant when freedom was offered.

He actually used me. Bounding lightly against my shoulder, he spurted skyward and was gone.

Roaring with rage, Plu rammed his way between us, getting after that fox.

#### **In Hot Pursuit**

Not silent now, Plu roared off through the woods in hot pursuit, belling loud and clear. Look out, you fox, I'll get you if it takes a week!

We clambered out and hunkered on the frost-covered slab pile surface. Sweated and cussed and listened to dog noise fast fading over the hill.

"That's gonna take a week," John said.

"Why don't you just reload and wait here for him, John?"

"Why don't you?"

Plu would be home about brunch tomorrow, we knew, dragged out, empty mouthed but infinitely happy.

"You know something?" John said.

"I dig that fox. Let's not run him anymore. Or at least, if the dogs hit him, let's not try to shoot him."

I admired smarts. "Good enough," I said. "Let's go home."

And so we aimed over the hill in moonlight that created just the right tinge to a satisfying day—where the rewards had been all in the mind.

Today, I can still call up the light dab of the fox's feet skipping off my chest. Great little trophy, that dab.



# The Cottontail Rabbit in Pennsylvania

By Dale E. Sheffer

Chief, Division of Research  
Pennsylvania Game Commission

**F**ROM TIME TO time in recent years a number of interested individuals have expressed concern about the abundance, or status, of the cottontail rabbit. Many factors must be considered if one is to understand the true current day status of this popular game animal.

Quite a few things have evolved since 1915 when small game harvest estimates were started. Lean rabbit populations occurred in the so-called "good old days," as well as years of good rabbit populations, even if most of us don't remember them. It is normal to recall the good things and forget the bad ones. However, one thing is certain and that is the rabbit population in the good years now is not as great as it was in the good years of two, three or four decades ago.

This is not hard to explain and understand if all the facts are recognized. Habitat deterioration, along with changes in rabbit behavior and activity patterns, have occurred in the past 50 years. Those claiming the cover is the same as years ago are wrong except in isolated instances.

Consider the changes that have taken place on farmland and forest land. High speed powerful farm machinery has allowed the farmer to clean up fencerows, swamps, cornfields, and odd corners. Advances in heating have eliminated the need to cut wood for the winter and now pasturing woodlots is common practice. The woodchuck, an uncommon animal at the turn of the century, is now found everywhere. The loss of above ground cover has driven rabbits into increasingly available woodchuck burrows. This, along with heavy hunting pressure and increasing numbers of farm dogs and cats, has changed



*Photo by John Plowman*

**JOE OSMAN** exhibits a day's limit of cottontails taken in open fields during the post-Christmas season last year.

the rabbit into a very nocturnal animal. Forest land rabbit habitat has generally deteriorated also in the past 50 years. Nearly all forest land was cut in the great lumber era just before and shortly after the turn of the century. For many years following these wholesale cuttings, our forest habitat was ideal for cottontail rabbits and snowshoe hares, and populations of these species were abundant. Natural

plant succession, and in many areas too many deer, eliminated the protective cover necessary to support good numbers of rabbits.

Habitat management for rabbits works very successfully. Numerous studies followed by applied management have shown that the rabbit is very manageable. Beagle clubs in Pennsylvania are good examples. Those that have followed recommended management practices annually have sufficient rabbits to conduct trials and train dogs. Many have learned that annual management produces a good rabbit crop without supplemental stocking.

### **Stocking a Fallacy**

As studies have produced the knowledge necessary for management, so have they shown the fallacy of stocking as a way to rabbit abundance. Survival following trapping and transfer into new territory never exceeds 10 percent regardless of the trapable source, or how many rabbits are released.

The cottontail rabbit, which is close to being the most sought game animal in Pennsylvania, is currently being studied. Three distinct types of habitat found in Pennsylvania today are under study. The three habitat types are: intensely cultivated or clean farmland, land reverting to brush (old farm fields), and land managed specifically for cottontail rabbits. Prime objectives of the current program are the determination of the size of the fall populations, how they fluctuate from year to year, and the percentage of these populations harvested by hunters. More rabbits live in each of the three types of habitat every fall than most people would believe. Even more surprising has been the finding that the hunter is not able to harvest one-half of what he should, due to the rabbits' limited availability. During October and November there are numerous daylight periods when only a small percentage of the rabbits are

above ground and available. This is true in the leanest years and the better years.

When weather during the extended season permits hunting, an increase in the harvest occurs which is a benefit to the hunter and not harmful to the highly renewable cottontail rabbit resource. Success is relatively good because a higher percentage of the population is available above ground during daylight hours at this time of the year. Another fascinating aspect of the availability of rabbits occurs during the summer months and for some forty years rabbit hunters have wondered what happens to all those rabbits they saw in late June and July. They seemed to disappear in August and certainly were not that plentiful when hunting season arrived. In addition to perplexing sportsmen, this has been an item professional wildlife people have been hoping to explain and document. What causes this apparent great loss in numbers of rabbits in late summer?

After doing field studies for 18 years, the writer now can report what actually is occurring within the rabbit population each summer.

The two most common assumptions are that either disease or predators take a heavy toll and thus rabbit numbers are seriously depleted. Although these two factors are very active in mid to late summer and can be expected when rabbits are most plentiful, this is not the most important item that makes the rabbit population seem to disappear.

The most important factor causing this phenomenon is the seasonal habits change taking place with each rabbit.

Some years ago the writer had the opportunity to study and observe rabbits within a 70-acre enclosure. Within the enclosure good food and cover were provided and a maze of trails 10 feet wide was planted to clover and kept mowed. Beginning in mid-June, rabbits observed on these trails





in early morning or late evening were counted twice weekly. By mid-July the number that could be seen during a single observational period (1 hour) had risen to 220. Beginning in early August the number observed started a steady decline, and by September only 24 could be seen during an observational period. When the number seen began to lessen, field searches were initiated to find dead rabbits. Only two were found. At this point it was thought that perhaps disease or weasels were killing the rabbits in woodchuck burrows. Many burrows were excavated but no carcasses were found. By this time mid-September had arrived and it was time to box trap the area. From the number of rabbits recently observed, there was little expectation that large numbers would be trapped. However, in three weeks 240 cottontails were removed from the area, and more than 70 were left as breeding stock for the following year.

The foregoing results made it obvious that there was no severe loss of rabbits in late summer. What actually occurred? A high percentage of the population could be observed in July and a much smaller percentage in late summer, probably due to changing feeding and activity habits with the advent of fall.

The key to increased rabbit popu-

lations now and in the future is getting habitat improvements on private land. More than 90 percent of our small game is found and produced on private lands, and the quality and quantity of adequate year-round rabbit cover and food are at the discretion of the owner. The Pennsylvania Game Commission cannot force private landowners to operate their property for the benefit of rabbits, nor does the Commission have the manpower or revenue to apply habitat management on private lands.

In May, June, and July rabbits feed heavily on tender grasses and clovers. Tenderness and succulence during these months is maintained to a degree by mowing. Plant growth slows in late July and the texture of the stems and leaves becomes coarser. The maturing rabbits begin feeding on plants (fall food) found in unmowed or denser cover areas and thus the animals are less readily seen. At this time of year they also feed more at night and less in early morning and just prior to dusk.

As with all research investigations, a result or finding is accepted only when it can be duplicated and similar results occur with each trial. This conclusion is currently being further tested as part of the Pennsylvania Game Commission's cottontail rabbit research project.



*Photos from Leonard Rue Enterprises*

**MOCKINGBIRD, TOP LEFT, IS the champion singer, according to many, but the cardinal and Baltimore oriole also are favorites.**

## About Bird Song

By Eugene R. Slatick

**B**Y THIS TIME you probably have noticed that bird song is back again. A few months ago the most common sound in the trees was that of the wind. Now innumerable choirs of birds sing.

Why do birds sing? Some movies and stories would have us believe that birds sing because they are happy. This may be true sometimes. But ornithologists tell us that bird song is a language that is almost as good as ours when it comes to communicating. Birds move around a lot, so they depend a great deal on song to keep in touch with each other. One of the

important roles of song is to announce a bird's amorous intentions. Another is to proclaim a bird's sovereignty over a particular territory. Bird intruders can usually be driven away by a song instead of a fight. And, of course, bird song helps us identify birds—though it's doubtful that the birds care about that.

The term "bird song" really includes several types of vocalizations: the primary (or normal) song, secondary song, and call notes. The primary song is generally a relatively long series of notes that have a recognizable pattern and rhythm. We hear



it most commonly during the breeding season. It is usually the song that helps us identify the bird. Secondary song is soft and commonly heard after the breeding season. A call note is generally short and simple. Some birds make non-vocal sounds. The low-pitched drumming made by the ruffed grouse is an example of bird song produced by the wings. Of all these different types of songs, the primary song attracts the most interest. And that is exactly what it is supposed to do.

Bird song reaches a peak during the breeding season, which for most birds starts in the spring and goes into summer. During that time the woods often seem to be filled with song, particularly in the early morning. In the late summer, when the nesting season is over, the amount of singing decreases noticeably. Some birds sing a little in the fall. A few, such as the cardinal and Carolina wren, sometimes burst out into song in the cold of winter.

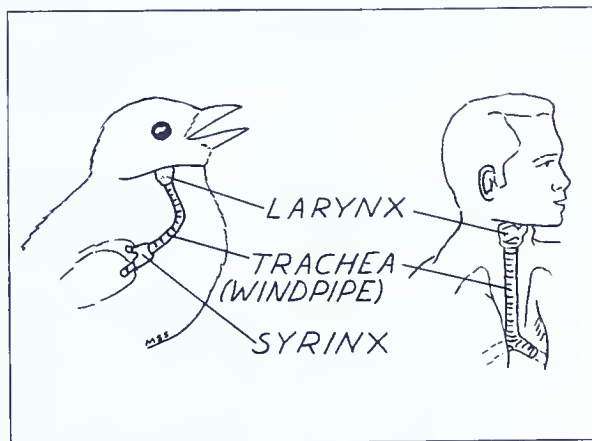
In general, bird song is controlled by various hormones, those special chemical substances that regulate certain activities in the body. In birds, the hormones seem to be activated by the longer periods of light that come with the spring. They prepare the birds for parenthood. They also start the male singing to attract females and mark off his nesting territory.

#### Serenades

And sing the male does. He selects a few favorite perches and then starts to serenade the females and the world in general. Some females sing a little, but they generally can't compete with the males.

Bird song usually has two daily peaks—in the early morning and the evening. The bird's biological clock wakes it long before most of us are up. And some birds rise earlier than others. For example, on a clear day in June you might hear a robin start singing shortly after 4 a.m. (daylight

saving time), which is within morning twilight even though sunrise isn't until about 5:30 a.m. That same morning at about 4:30 a.m. a dove might start its mournful daybreak song, while at 4:45 a.m. the dawn might be pierced by the clear *chirpity, chirpity* of the Carolina wren. On a cloudy day the sing-

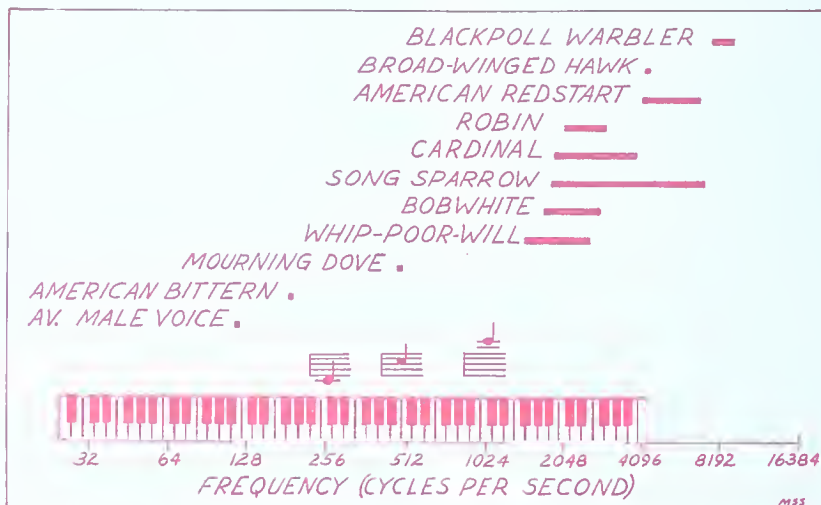


**A BIRD'S VOCAL apparatus is in an organ called the syrinx, at bottom of the windpipe, while human vocal cords are in the larynx, at top of windpipe.**

ing will start later and end sooner. High winds and hot or chilly temperatures tend to dampen the urge to sing.

For some birds, like the whippoorwill and the owls, the night is the time for song. On a cloudy day they start singing earlier in the evening and continue longer into the morning. During the peak of the breeding season, however, many daytime singers often burst into song during the middle of the night, especially when the moon is bright. You might, for example, hear robins, song sparrows, chipping sparrows, and catbirds. The mockingbird frequently runs through his repertoire at night, often much to the dismay of anyone nearby trying to sleep.

Most birds have a distinctive theme song. We have no trouble identifying birds that call their names, like the bobwhite or killdeer. But even the more complex songs have a general pattern that helps us identify the



**THE PITCH OF BIRD SONG** as compared with the musical scale.

singer. There are slight differences in the songs of birds from different areas. If you learn the song of the song sparrow in one part of the state you might be a little surprised when you hear it in another part and find that it isn't quite the same. In this respect, birds aren't very much different from our human songsters. Each bird sings the same basic song a little differently from its relatives.

### Virtuosos

The bird world also has its virtuosos who can imitate the songs of other birds. Among these are the mockingbird, catbird, brown thrasher, and even the pesty starling. The mockingbird is the best of the mimics. One of them in the South reportedly imitated 55 different birds in an hour.

Song is an inborn ability in birds. As early as two or three weeks after birth a bird can start singing the basic parts of its song. But before it can sing the full song, the young bird must first hear the full song sung by the adult. If for some reason it doesn't, the young bird's song will be rambling and complex—and not very useful as a language.

As some poets have professed, a bird's song really does come from deep within it—at least in a physical sense. A bird's vocal apparatus is an

organ called the syrinx, which is at the lower end of the trachea (the "windpipe"). By comparison, our vocal cords are in the larynx, which is at the top of the trachea. The ornithologist uses the muscles and membranes of the syrinx, and not a bird's song, to classify a bird as a "song-bird," a category that accounts for almost half the world's birds.

The syrinx produces sound when air from the lungs passes over the membranes and causes them to vibrate. The muscles change the tension of the membranes to produce various sounds. Small as it is, the syrinx is very efficient. It can produce a song that is loud and clear or soft and muffled. Although the syrinx was recognized as the bird's song organ as long ago as the 1600s, its workings are still not fully understood. The name "syrinx" is appropriate because it refers to the musical pipes of Pan, the Greek god of forests and fields. According to mythology, a river nymph named Syrinx cried out for help while she was being pursued by Pan. The gods changed her into a reed, which Pan made into his legendary musical pipes.

Musically speaking, the range of bird song is from less than an octave to about two full octaves, as in the song sparrow and wood thrush. The



average frequency, or pitch, of bird song is about 4300 cycles per second (cps), a little higher than the highest note on the piano. But the frequency range varies greatly. A robin has a range from 2200 to 3300 cps, compared with the song sparrow's range of from 1900 to 7700 cps. The black-poll warbler, a migrant in Pennsylvania, sings in a higher pitch—8000 to 10,225 cps. Compare these with a soprano, who has a range from about 250 to 850 cps.

Birds spend a lot of time singing during the breeding season, when they are in their best voice. Thanks to the tireless efforts of several bird watchers, we have some idea of just how much time a bird spends in song. In one day a song sparrow was reported to have spent a total of nine hours singing. A red-eyed vireo, a common songster in Pennsylvania, reportedly sang 22,197 times in one day.

Identifying a bird by its song can be satisfying to anyone who spends time outdoors. In a sense, it can bring a person in closer rapport with nature, just as the ability to understand a foreign language helps a traveler in a foreign country.

Suppose you are walking through a field and hear a bird whistle something like *tee-yah*, *tee-yair*, where the last note drops a little. If you know the song, you will be able to identify the bird as a meadowlark even though you can't see it. Perhaps you are in a brushy wooded area when you hear *drink-your-tea*, followed by a sharp *chewink*. That's the rufous-sided towhee, also known as the chewink.

Learning bird song takes a little effort. You will be fortunate if you are able to tag along in the woods with someone who knows bird songs. But you can learn a lot by yourself. You can also listen to records of bird songs. Some persons find that they

can remember a song if they write down words or phrases that seem to resemble the song. Others prefer to use a type of shorthand to sketch out the pattern and general pitch.

Bird song is an old sound. It dates back millions of years, long before there were any human ears to listen. Perhaps it helped awaken the musical spirit in man. Bird song reaches its heyday during this season. Now is a good time to go out and listen.

#### Some Birds Named After Their Songs

	Song
Bobwhite .....	<i>Bob-white</i>
Killdeer .....	<i>Kill-dee</i>
Laughing Gull .....	<i>Ha-ha-ha-ha-haah-haah</i>
Dove .....	Mournful <i>Cooo, cooo, cooo</i>
Whippoorwill .....	<i>Whip-poor-weel</i>
Phoebe .....	<i>Fee-bee</i>
Wood Pewee .....	<i>Pee-a-wee</i>
Blue Jay .....	<i>Jay, jay</i>
Chickadee .....	<i>Chick-a-dee-dee-dee</i>
Catbird .....	<i>May-ow</i>
Chipping Sparrow .....	Rapid chipping noise
Grasshopper Sparrow ..	Grasshopper-like trill

#### For Further Reading and Listening

*A Guide to Bird Songs*, by Aretas A. Saunders. Doubleday and Co., Inc., Garden City, N. Y., 1951. Represents bird songs with diagrams.

*A Field Guide to the Birds*, by Roger Tory Peterson, Houghton Mifflin Co., Boston, Mass., 1947. Describes bird songs with words and phrases.

*Birds of North America*, by Chandler S. Robbins, Bertel Bruun, and Herbert S. Zim. Golden Press, N. Y., 1966. Illustrates bird songs with Sonagrams (diagrams that show the frequency and length).

*Bird Song: Acoustics and Physiology*, by Crawford H. Greenewalt. Smithsonian Institution Press, Washington, D. C., 1968. A technical approach, with records.

*Song and Garden Birds of North America and Water, Prey, and Game Birds of North America*, National Geographic Society, Washington, D. C., 1964 and 1965. Both books contain records of bird songs.

Records of bird songs are available from the Cornell Laboratory of Ornithology, 159 Sapsucker Woods Road, Ithaca, N. Y. 14850, and the Federation of Ontario Naturalists, Edwards Gardens, Don Mills, Ontario. (Note: Some libraries have records of bird songs.)

### The Oviparous Kind

A temporary egg tooth enables a baby snake to break out of its egg.

# A Somewhat Uncommon Breed

By J. B. Dibble, M.D.

I AM a hunter.

Once I was the hunted, and I can still hear the whip-crack of bullets, the *whunking* of mortars, the whining rumble of artillery shells. And I will always remember that thud just above my ear—the thud of an incoming shell that would have obliterated me had it exploded—as I lay crouched against a tree on a sidehill above the Communist lines in North Korea.

So why then, with these memories still so clear, am I a hunter?

I will tell you.

Far, far back in unrecorded time the forerunner of modern man awakened each morning with a hunger gnawing at his viscera. He stretched out in his cave, or under a tree, or on the ledge where he had perched for protection, and he made his plans for the day. On most days he was concerned with only one thing: finding food.

By the light of the first rays of the sun, this man searched the underbrush for edible roots, scoured the hillside for berries, and kept one eye on the sky in watchfulness for the honey bird. When the bird appeared, the man followed him to his honeycomb and climbed the giant trees to scoop out the honey after the bees had been driven out (with firebrands when he came to use fire).

And he hunted game. At first he hunted inefficiently, with poor success, but later he utilized his increasing intelligence to refine his techniques. He learned the habits of the animals. He learned to stalk, to fashion strong bows and straight arrows and swiftly flying spears. And then he taught his sons to use these tools of survival.

And he survived.

The *plains-dwelling* predecessors of man, the hunters, survived. The *forest-dwelling* fruit-eaters, a separate race of pre-men who had not learned to hunt, succumbed, and their line is no more. The meat-eaters, strong of body and brandishing the weapons of their society, produced man as we know him today. This instinct to survive, to hunt for the life-sustaining protein, is deep within all of us.

So I obey this instinct and I hunt.

But there are many ways to sublimate the hunting urge which is within us. Many men do, and I could, and at times I have. So there must be other reasons why I go out into the woods and fields and swamps and sloughs. There are.

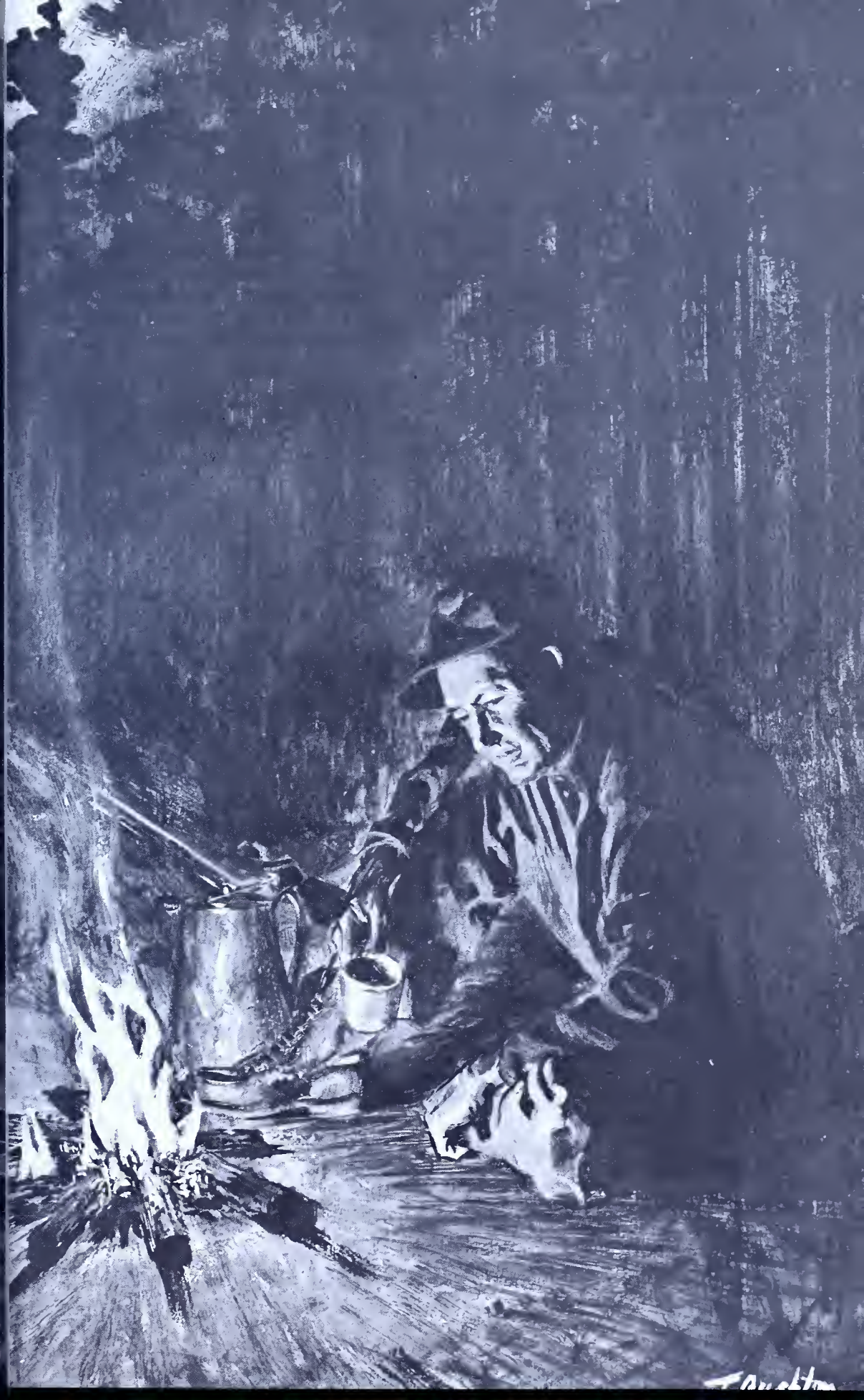
There is the excitement of the chase.

Perhaps it is as impossible to describe to the nonhunter the thrill of

## About the Author

J. Birney Dibble was born and lived for four years in Madras, India. He grew up in northern Illinois, spent three years in the Navy during World War II, studied medicine at the University of Illinois, spent sixteen months with the 1st Marine Division in Korea, where he received two combat decorations, achieved specialty rating in general surgery at Cook County Hospital, and for the past fifteen years has practiced surgery in Eau Claire, Wis., except for two periods totaling three years at Kiomboi Lutheran Hospital, Kiomboi, Tanzania. He has written articles for a number of magazines, his first book, *In This Land of Eve*, was published in 1964, and his second, *The Plains Brood Alone*, is scheduled to appear this year.





the hunt as it is to describe to the blind the beauty of intricate filigrees of frost inscribed on a winter window-pane.

But shall I try?

It was a brisk fall morning. As my son, Eric, and I returned to our cabin in the wilderness of far northern Wisconsin after an early morning duck hunt, we spotted two deer standing in a small glade 100 yards from the dirt road. They stood watching us as we drove slowly by, then resumed their feeding.

I strung my bow and began my stalk about a quarter of a mile from the deer, downwind and well out of sight in the forest, watching the ground for sticks, dried leaves, tilted rocks—anything that might make an unusual sound in the quiet woods. My heart pounded furiously, anticipating. I went around knee-high brush, step by slow step. I crept on hands and knees through thick brush higher than my head, moving with my cumbersome bow and arrow with what I thought must be a terrible noise. By sheer willpower I maintained my slow pace, all my muscles aching to move faster, even to run.



**I LOOKED UP** and the two deer were visible not 15 yards away. I moved my bow a few inches and that was enough to startle them. A half dozen bounds carried them out of sight.

The deer were close now. I researched the clearing and could not see them, but twenty yards to my right were a few small evergreens, and I knew the deer must be behind those trees. My bow was ready, the arrow nocked, and I pulled back on the bowstring a few times to see if my tensed fingers still had life in them.

With agonizing slowness I took a step forward with my left foot, body precariously off balance, gaze glued to the small pine trees. Not a sound could be heard except my breathing and the thudding in my chest. I glanced at the ground, and when I looked up the two deer were visible not fifteen yards away. We stood that way for an interminable time (seconds, minutes?) until I could bear it no longer. I moved my bow a few inches and that was enough to startle them. A half dozen bounds carried them out of sight. My hunt was over.

My taut drawn body, nearly ossified from its rigid position, relaxed, and I moved my arms and legs to get the blood circulating. The deer had gotten away, but it had been a successful hunt: I had stalked two of the warriest of animals and had come up to within fifteen yards of them.

So I hunt. And more often than not, my success or failure is not measured by the pounds of meat in the freezer.

So there is the instinct, and the thrill of the chase. But is there more?

There is.

In May of 1851, Englishmen and other men from the world around flocked to the Crystal Palace in London. They had come from their fields, gardens, and forests, from scenes and sights that God had made, to view what man had made. They were awed, and rightly so, by girders of iron and panes of glass that were larger than had ever been made before. And they marveled at the moving machinery: steam hammers, hydraulic presses, huge power looms, and the engines that drove them.

Today all of those mighty machines



are obsolete and have been replaced by bigger and better machines, so much bigger and so much better that in order to live amongst them almost all of us have left the land our forefathers tilled. Now some of us try to leave that *once-strange* towering mass of manmade things and move back into the *now-strange* countryside from which our ancestors delivered us.

I am one of those who tries. I can do it by taking a walk through the new spring woods, tinged a pale green by the budding birches. I can do it by scudding softly through the new-fallen snow on the tote roads and deer trails, camera in hand to catch the beauty of the red-berried wintergreen as it pushes aside the snow to reach for the yellow sun. But also I can do it with gun in hand, bowing to the instinct within me, and with heart beating in the excitement once shared by Nimrod, great-grandson of Noah.

Many are the scenes that come to my mind's eye as I consider what memories are mine. There is the crackling dryness which alternates seasonally with the vivid greenness of the great expanse of open bush in East Africa, where I lived for almost three years, and where hunting was not only our main recreation but our only source of good meat.

### Splendor of White Mountains

There is the splendor of white mountains as they rise thunderously from the dark green rainforests edging the ice-cold waters of the Pacific Ocean in the island country of Southeast Alaska. These, and many more, stimulate this hunter's thoughts with a grandeur he will never forget.

But another memory is even brighter:

Through our wilderness in north-west Wisconsin flows the little Ounce River. It takes its origin from cold springs fifty miles away, cuts through alder thickets and jackpine forests and popple-birch stands till it joins with the Totagatic River, and then



**SOMETIMES I TAKE** the beagle and go after snowshoes. Or I may take the Lab for duck or partridge. And sometimes I just go alone.

both are immediately forgotten when they lose themselves in the storied Namekagon. But in our country, the Ounce is *the* river. We fish it for trout in the spring, and hunt along it for deer in the fall, and when winter comes, its banks become the home for the most common denizen of our woods, the snowshoe hare.

One cold morning I stood on a side-hill above the Ounce, my goosedown jacket snugged tightly around me for the thermometer had read five degrees below zero when we left the cabin. The world was a study in blacks and grays and whites, and a colored picture would have been no better than a snapshot in an album. The sun was obscured by low-hanging gray clouds. There was no wind. Fifty yards away Eric was taking his stand, and the snow squeaked under his boots as he moved through the six-inch powder. Two other hunters had moved into the river bottom 200 yards away and were moving slowly through the tag alders toward us. Ahead of them our beagles cast this way and that, anxious to fulfill their role in life, to follow *their* instincts, if you will.



Suddenly Buttons found a track, and the quiet world reverberated with the music of her voice. Then Cindy found it also and the duet sounded across the black-whiteness to us. The hunters stopped, and all that could be heard was that glorious chorus.

And then it started to snow, the tiny white crystals sharpened by the cold, not thick and soggy like the stuff that falls when it is warmer. As if this weren't enough, the yellow sun appeared above the jackpine ridge across the river, shining through the falling snow and transforming it. It was as if millions of diamonds were floating softly through the air, each one perfect in itself, but still enhancing the beauty of the others. I was entranced. Then it seemed as if I were at the bottom of a bright sea, with myriads of phosphorescent lights drifting down around me, scintillating, incandescent, sparkling with reflected glory. The mesmerization was complete when it seemed that the sun stood still and the earth ceased in its interminable revolutions.

Most of the time I hunt with other people whose attitudes echo mine; we do not hunt with the ferociousness born of a desire to kill for the sake of the kill. Occasionally I have hunted

with men like that, but I do not hunt with them again. Oftentimes I hunt alone, and the aloneness which one can have in the woods is the bonus added to the regular payment.

Some people become upset, desperate, almost panic-stricken when they find they are alone. They go visiting, or they call their friends on the telephone, or they invite someone in. For others, loneliness is a way of life, and they adjust, but they seek out ways to avoid the loneliness whenever they can.

Most of us, however, find ourselves constantly surrounded by family, friends, fellow workers; we are never alone unless we make a special effort. So sometimes I take a rifle or shotgun down from the rack, put one of the dogs in the back of the station wagon, and take off for the woods for a few hours. I may take the Lab and go after duck or partridge; I may take the beagle and go after cottontails or snowshoes; I may go without any dogs and seat myself in the fall colors or in the winter whiteness and wait for the elusive bushytail to show himself.

### Two Days Alone

Sometimes I take a longer trip to achieve that aloneness that we all need. I remember one weekend in late October when I spent two days camped out in the lower Chippewa River Valley, miles from anywhere or anybody. With old Buck, my jet-black Lab, I went five miles upstream into an uninhabited area that I know well. Know so well that I could count on being alone.

For two days I was my own boss. There was no need to talk to anyone but Buck. I could make my own plans without discussing the pros and cons with anyone. I could hunt where I wanted, by standing or roaming the potholes; I could eat when I wanted, sleep when I wanted.

And I did just that. I put up my tent, collected some firewood (since I had purposely not brought a camp



stove), and then sat in the doorway of the tent smoking my pipe and scratching Buck's ears.

For two long days I walked from slough to pothole to marsh lake, jumping ducks on some and easily getting my limit of eight. As the sun went down the first afternoon, I cooked supper of hot beef stew, and as the stew heated, a full moon showed itself in the east, reminding me of the many camps I had made on the open bush of the plains of Africa.

The next morning was a howler, with wind whistling through the leafless branches overhead. I was snug and warm in my down sleeping bag, with Buck nestled against me. Breakfast for me was a half-pound of bacon and two eggs, and for Buck a pan of dried dog food. We broke ice on the marshes that morning and once spooked a flock of black ducks from a tiny marsh so small I didn't see any water until they were up and gone.

Late that second day I went home to be greeted by my family with the warm enthusiasm that is perhaps unmatched by any other human emotion. But I had had those two days in the wilderness alone, my mind turning in low gear or out of gear entirely, my thoughts uncluttered by pressures and drives and extraneous forces that, try as we might to avoid them, shape our way of life in the city. I would not live that way for long, for the seeming freedom is but a snare, and time too long unoccupied a prison for the mind. But in small segments of time, short periods of isolation, the freedom is real and the prison has no walls.

And so I hunt, for companionship . . . for aloneness.

There are other reasons, too, why I hunt. There is the challenge of dangerous game—climbing mountains for bear, or searching the dense African bush for Cape buffalo. There is the challenge of the countryside itself—the snow slides, the dryness, the heat or

the cold, the snakes and the scorpions, the deep cold rivers or the sluggish, brown, crocodile-infested jungle streams. All of these I have seen, and conquered, and come home. This is ego-satisfying, the fulfillment of the male animal in me.

### More Satisfactions

There are still more satisfaction. There is the thrill of watching good dogs work in concert with each other and with the hunter, excitement shining in their eyes, their every muscle vibrating with the joy of it all. There is the pleasure of watching the family feast on partridge, quail, pheasant, venison, squirrel and rabbit, not to mention my own enjoyment of a well-cooked meal of fresh wild game. There is the exhilaration of the mind that accompanies the physically fit body that can push into trackless snow on skis or snowshoes. There is the gratification of seeing a boy growing up with a love of the out-of-doors, of seeing him choose a day in the woods rather than a day at the movies or glued to the television set.

So, when the summer green begins to fade, and the summer heat begins to ease, you will see the other hunters and I, a somewhat uncommon breed, begin to watch the skies for the first flights of the wild geese, and we may be heard calling to each other across concrete streets filled with automobiles and people, "Hey, Fred, I heard the woodcock are down," or, "See you tomorrow morning, Karl; is 4 a.m. too late?"

Yes, these friends and I are hunters. We recognize this fact and are not ashamed of it. Moreover, we know that we inherit our instincts from ancestors whose hunting abilities insured the survival of not only the individual but also the entire species of man. We are all hunters, whether we realize it or not, for no one can deny or sublimate his heritage forever.

**Readers Will Remember Bob Latimer's Earlier Accounts of Favorite Hunting Dogs . . . "A Braggin' Dog," the Story of Brownie, in the June, 1969, Issue, and "Snap—Another Braggin' Dog," in the July, 1969, GAME NEWS. Here Is . . .**

## *Rose--Still Another Braggin' Dog*

By Bob Latimer

**A**BOUT the time Brownie commenced to slow down a bit, I started to look around for another dog to get ready. "Skinny" Corson, a friend with whom I hunted a lot, heard of a litter of pointers up in Cascade. Tom Logue owned the female and these pups were supposed to be out of a Rothfuss dog in Williamsport. Rumor was to the effect that both these dogs were really good on grouse. Had known the Logues, so Skinny and I went up. Sure enough, there was one left, a female, and she was pretty. I took to her at once. Can't remember how old she was, but she was about half grown. We "talked dog" awhile, then went to the cool of the cellar—that was proper procedure at that time when visiting anyone—and I might say right here and now that the Logues always had *excellent* cider.

This wasn't a hard and fast business deal, but a deal between friends, which naturally takes more time and conversation. To those of you too young to know it, there have been many important deals closed sitting in a group alongside of a barrel of cider—and this one was a good one for me. Can't remember what Tom said he thought he should have for this puppy, but whatever it was, it was within reason and we closed the deal. Tom said they had named this pup "Rose of Killarney," so I left it that way—Rose for short. We loaded up, bid Tom good-bye and Rose came to Muncy with us. Put her in the yard with Brownie and they became friends at once.

At that time I was working all over

the state as traveling Game Protector and was away a lot. Not having the time to yard-break her and work her some before fall, I persuaded Roy Egly of Muncy to do this for me. Roy and I had hunted together a lot. He was then, and still is, a good man with dogs. He did an excellent job on Rose and when he turned her back to me before the season, she was well mannered. Roy told me she had a choke-bored nose and that she handled woodcock well. All she needed to make her a finished product was to have some birds shot over her. Like always, it seemed that the first day of woodcock season would never come. Maybe it was a good thing, it gave Rose and me a chance to get well



**HER NAME WAS "Rose of Killarney," but I just called her Rose. She had a choke-bored nose and handled woodcock, grouse and pheasants.**





**FOR AWHILE I THOUGHT ROSE** was gunshy, but she got over that and became a fine, dependable dog, one that gave us a lot of pleasure.

acquainted. I liked her and she seemed to think I was O.K. too.

When opening day did come, I knew of a big hardhack meadow and swamp about two miles below Beaver Lake that had a lot of woodcock. Frank Crosby, my brother Jim and I drove up there. Had taken Brownie along too as a "spare," but left him in the car and started Rose to work. From the very beginning she worked just like the doctor ordered. We hadn't gone far and had shot a couple over her points, when she pointed again. This time one of my pardners moved in and, when the bird flushed, he shot several times at it—and the gun was too close over her head for her liking! She tucked her tail between her legs and hightailed it for the car, which she had crawled under when I got there. I was sick about it, but it was done and I had a gun-shy dog on my hands. I put her in the car and we hunted Brownie till we finished up, the limit being six each at that time. Even though we had a good shoot that

day and finished early, we went home feeling badly.

We had left some birds there, so the next morning I went back there alone with Rose. Had little faith that she would ever get over being gunshy and was prepared to do away with her that day in case she didn't. That is far from being a pleasant way to start on a hunt, but thought it was the only thing to do, in case she didn't show any signs of coming out of it. The one time before this that I had tried to cure a gun-shy dog ended in a flat failure.

When we left the car and went into the cover, she acted very timid and kept behind me, almost walking on my heels. When I stopped, she did too. Finally she must have forgotten herself and moved ahead a little and pointed. This was ticklish business. I was hoping it was a woodcock and that I could hit it. Things couldn't have worked better. The bird gave me a quartering shot and I winged it. It lit on a little sidehill and fluttered

down towards us. When I shot Rose flinched and almost bolted, but when she saw the bird fluttering, she caught it and brought it to me.

Anyone who has ever worked a dog very much knows how I felt. I made a big fuss over her and she acted as if she thought this kind of business might turn out to be fun after all. Anyhow, we finished up on that flat and she seemed to perk up more with each bird she found. When we came home that day, she was a finished woodcock dog and I was about as happy as any one person could be. There were a lot of birds then and I and my friends hunted them at every opportunity. Rose continued to improve and that season had 166 woodcock shot over her.

#### **Took Well to Grouse**

She took to grouse just as well and we had many good days with them. A couple of the Logue boys, Mike and Phil, had a good day's hunt over her on Bear Mountain, the same day we found the two bucks with locked antlers above Nordmont — but that's another story. Col. Lynn G. Adams, Col. Wm. C. Fisher, Major Jake Mauk and I had some grand days over her in the Elklands of Sullivan County. "Nim" Case of Troy can remember when a bunch of us taught those grouse some manners in the Frying Pan section of Slate Run and Sullivan County forest rangers Sumner McCarty and John Annable liked to see her work. Lee Artley and Geo. Diefenderfer, as well as W. C. Shaffer, seemed to think she was their kind of

a dog. Many others praised her highly after a day behind her.

When it came to ringnecks, she liked them and handled them well too. Must admit after working her in the open on pheasants, it took a bit of time to screw her down again to woodcock and grouse size, maybe a half hour, but was always able to do it.

She was a good looking liver-and-white pointer, trim and fine haired. When she was worked down so her muscles showed well, she was truly a picture. She was very affectionate and made friends quickly, I might say a bit of a flirt. Brownie, the first braggin' dog, was as honest as he was homely. Rose was good looking to a fault — *but she did need a boss*. When she had that, she was one grand dog. Any dog I ever worked I tried to impress with the idea that I intended to be the boss, so we got along well.

As a retriever she left little to be desired. She was soft-mouthed and would hunt an area almost inch by inch as long as I would keep telling her "Dead bird." Anyone telling me he had a dog that never lost a down bird, I always felt had never had very many birds shot over him — or else the owner's memory was a bit faulty. A lot of birds were shot over Rose and can remember a couple she never did find. But her finding and retrieving were a lot better than our shooting was over her lifetime, so let's drop it at that. She lived to be 14 and slept away easily. She gave a lot of people much pleasure and she certainly earned her admission to wherever good dogs go to!

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### **Dauphin County Snake Hunt**

The annual Dauphin County snake hunt, sponsored by the Keystone Reptile Club, will be held this year on June 3. Registration will begin at 6 a.m. at Koons Memorial Park, Linglestown, Pa. Rattlesnakes, copperheads and large black snakes will be taken. They may be hunted anywhere in Dauphin County. No snakes will be killed. All persons interested in snake hunting are welcome.



# THE PRAYING MANTIS

By William Wagner

**I**T PRODUCES no noise. It is voiceless. It is the only insect that can turn its head like a man. It blends well with the foliage of its background. Its body is camouflaged in greens and browns. It remains for lengthy periods in a pious attitude, forearms uplifted as though in prayer; it awaits its victims in this position.

This curious creature is the praying mantis. It is often called the soothsayer, the nun, or the devil's racehorse.

Nearly as long as your hand, the winged adult insects seem to make their appearance late in summer. Some people think they have arrived as a flock of migrants. Actually, they have been there all the time. So well camouflaged is the mantis, so silent are its ways, that it usually isn't noticed until it reaches full size, develops wings, and begins to fly about. The male, slimmer and more active than the female, can rise high in the air and travel considerable distances.

Nearly 150 of these insects, in a single week, landed on the observation tower of the Empire State Building in New York City. Mountain climbers have been surprised to find them high in the Himalayas, and in the Alps.

There is one species of praying mantis that is native to the United States; the others have arrived quite by accident, probably with their egg cases fastened to nursery stock. At any rate, man, especially gardeners and farmers, quickly recognize the mantis as a friend, because of its great appetite for different kinds of insects. Actually, they are about the only insects introduced accidentally into America that proved to be beneficial.

A mantis will attack almost anything within reach that moves. Its main diet consists of beetles, grasshoppers, and caterpillars. However, it will catch a wasp or a bumblebee just as readily as it will squash a bug or housefly. There are records of these insects capturing hummingbirds, moths, mice, and small garter snakes. The praying mantis will rear up and box with a kitten, or it will hold its own with a quarrelsome English sparrow. While it is fearless and combative, always on the alert for a meal, it is completely



**A PRAYING MANTIS** will attack almost anything within reach that moves. Its main diet consists of beetles, grasshoppers and caterpillars, but it will eat wasps and bumblebees readily.



**GARDENERS AND FARMERS** recognize the mantis as a friend—despite its other-world appearance—because of its great appetite for different kinds of insects.

harmless to man, of course.

In the house a mantis makes a good pet. It will eat insects, and even bits of corned beef or hamburger. It will remain like a statue on a plant for hours at a time.

Life for the praying mantis begins in spring. All winter long the rounded egg case, about the size of a walnut, has remained attached to some twig or plant stem, fastened the autumn before by the female mantis.

The hazards of winter are many. Sometimes mice gnaw into the egg cases. Occasionally woodpeckers drive their chisel-like bills into them and eat the eggs inside. Or grass fires might destroy the weeds to which the cases are attached. But, in spite of these hazards, most of the egg cases survive until spring. As the days become warmer, the eggs become softer. When the time is right, hatching begins.

This is the most dangerous time of life for the praying mantis. The newly hatched insects are soft, defenseless, easy prey for attackers. Ants often swarm over the mass of newly hatched mantises, carrying off the young insects in large mouthfuls. Throughout its later life, the praying mantis avoids

the tiny ant. While it will attack a wasp or hornet with complete disregard for its sting, it does not strike at a passing ant. There seems to be some kind of lifelong understanding between these two members of the insect world.

Each mantis is a loner. It searches for its own food and survives by virtue of its own skill. Should one of its kind come within range of its spiked forelegs, it would snap at it as quickly as at any other prey. When an egg case within a closed cage hatches, the number of young insects decreases rapidly through cannibalism.

The praying mantis always captures its prey in the same manner. With its folded forearms lifted, it remains very still among the leaves—or cautiously moves forward like a stalking cat until its victim is within easy reach. Then out dart the forelegs. The two parts, with the spikes facing each other, snap shut over the back of the prey. The victim is unable to move, imprisoned as though in a toothed steel trap.

Nothing seems to affect the digestive systems of these insects. They have dined on green paint placed on insects for purposes of identification. They have eaten insects which I've taken directly from ammonia and wood alcohol.

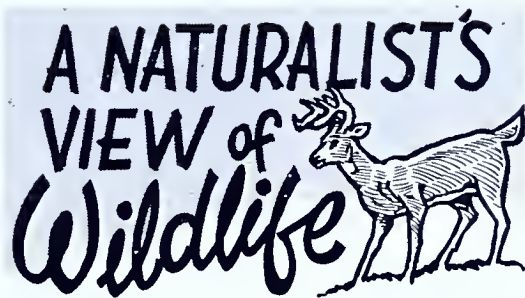
By the time the praying mantis has nibbled its way through June, July and August, it is ready for its final molt. At that time, its slender, gauzy wings appear and it is full grown. In the air it pilots along on four fluttering wings with its neck outstretched in the manner of a wild goose.

Early Indian summer finds the life of the adult mantis in its final weeks. With the end of the mating season, and the completion of the egg cases, the climax of life is terminated for the praying mantis. Even when the mantis is taken inside and fed on plump crickets and other insect delicacies, even when it is kept warm both day and night, it lives only a few days—or weeks at most—beyond its usual existence.



I RECENTLY flew out of New York's La Guardia airport on a trip that took me to some of our Western states. It was the most perfect day for flying that I have ever seen and although I had flown this way a number of times before, I sat like a novice with my nose pressed against the glass to watch the splendors unfolding below me.

It was easy to trace our progress from the air. As we approached the Delaware River we were just a few miles south of the Water Gap. Although I could not pick out my house,



country for hawks and eagles. Hawk Mountain Sanctuary, a few miles north of Port Clinton, is a mecca for bird watchers, bird lovers and bird photographers.

## The Broad-winged Hawk

### *Buteo platypterus*

By Leonard Lee Rue, III

the Kittatinny Mountains below were as familiar to me as the palm of my hand. At the speed we were traveling, the striated ridges of the Appalachians soon dropped from sight to give way to the convoluted Alleghenys. I am constantly amazed at the tremendous forested tracts that still exist in Pennsylvania. The checkerboard patterns of the flat lands of Ohio, Indiana and Illinois are interesting, but they just do not hold the fascination for me that the wooded hills do. Although we were flying at heights that exceed those of most birds, what I was getting that day was a bird's eye—or rather a hawk's eye—view of Pennsylvania.

The Blue Ridge Mountain of the Kittatinny range extends from High Point in New Jersey's northwestern tip and was at one time the barrier that was breached and is now the Delaware Water Gap. In Pennsylvania, the same ridge heads southwest to the Susquehanna River, then veers sharply southward. This mountain range is world famous because it is one of the principal flyways in our

The annual southward migration of hawks begins as early as the last week in August, building to a peak in the third week in September when the massed flight of broad-winged hawks takes place. Then, although the migration of the different hawk species continues, the excitement peaks again the last of October and the first of November, when as many as a dozen different species of hawks can be seen in a single day.

Although Hawk Mountain is a fascinating place, there is little point in my driving that far. I live at the foot of the Blue Ridge Mountains and within five minutes I can be up on the crest to watch the same hawks as those at Hawk Mountain will see. Only I get to see them first. A very good friend of mine, Floyd Wolfarth, was on the ridge on September 20, 1969, and saw over 10,000 broad-winged hawks soar by overhead. Although I have seen a goodly number of hawks, I never have been fortunate enough to witness one of these mass flights.

Thankfully, the broad-winged hawk





is protected in both New Jersey and Pennsylvania. Hawk Mountain came by its fame as a hawk sanctuary in the recent past.

The broad-winged hawk is a wilderness bird, one whose numbers are constantly diminishing because our wilderness is constantly diminishing. Like so many other creatures, the broad-wing's range is being reduced by the steam roller-like advance of our ever increasing human population. This hawk's nesting range extends from the Gulf of Mexico to Canada, north of the Great Lakes and the St. Lawrence River, and from the Atlantic Ocean to just west of the Mississippi River in heavily forested areas. Its winters are spent in Mexico and Central America.

About the first of April the broad-winged hawks head north to their breeding grounds. They do not flock up but just straggle northward, sometimes in small groups, sometimes singly, most commonly in pairs. Within a month's time they will be back on their breeding grounds and in some cases they will be back to the same nest site they used the year before.

In all of the time I have been afield, I have only found one nest of the broad-wing. It was in a mature stand of timber about three-quarters of a mile from the Delaware River on the western slope of the Blue Mountains. The nest was not much larger than a crow's nest and was in an oak tree about 30 feet above the ground. The nest looked like a brand-new one but of that I could not be sure because the hawks always add new material to any of their old nests that they are reusing. This hawk will sometimes take over an old crow's nest or an abandoned gray squirrel's leaf nest for its own use.

The broad-winged hawk is one of our smallest buteos, or soaring hawks. They are slightly larger than a crow, measuring up to 18 inches in length and having a wingspan of about three feet. The wing, as the bird's name im-

plies, is exceptionally wide. The tail is also full, making a conspicuous fan in flight. The two or three alternating wide black and white bands beneath the tail are one of this bird's most distinguishing field identification marks. The terminal band on the tail is white, but this is a narrow edging and quite inconspicuous. The head, neck and upper parts of the broad-winged hawk are a dark brown, the underwings are white and the belly is white, heavily barred with rusty red. The immature broad-wing has a white belly flecked with streaks of brown.

### Hunts From Perch

Although the broad-winged hawk is a soaring hawk and is well known for describing lazy arcs against the firmament, it does much of its hunting from a perch. It favors hunting along old woods roads or at the edge of a clearing, some spot where its small mammal prey must expose itself in the open. This preference is again borne out by the bird's name, "broad-winged." Those same broad wings which make soaring and sailing so effortless can be a handicap in high weeds or in heavy cover and brush.

The broad-wing is one of the most beneficial of all our hawks. A United States Department of Agriculture study states that about 40 percent of this hawk's diet is made up of insects. This points up the reason the broad-wing prefers to hunt at the edge of clearings. It is in such areas that crickets and grasshoppers are most numerous. The forest adds moths and beetles to the list.

Reptiles and amphibians make up some 30 percent of its diet. In fact, this hawk eats more snakes than any other hawk I know of. The bulk of these are water snakes and the hawk is helping the local fish population with each water snake that it catches. While hunting for snakes along the edge of ponds and lakes, the broad-wing will also snatch up every frog and toad it can locate. The very bitter,

slightly poisonous secretions of the toad's skin are little deterrent to the hawk. Most birds have poorly developed senses of smell and taste, which nullifies any such defense used by their prey.

Woodland rats and mice furnish about 23 percent of the broad-wing's food. The white-footed mouse, the meadow vole and the red-backed vole are the mice most commonly taken. The wood rat is more often taken than is the brown rat, but only because the latter lives close to man and the broad-winged hawk does not.

### May Take Birds

Occasionally a small bird may be taken as food, but this is the exception. In fact, of all the wild creatures it must be said that the broad-winged hawk is almost entirely beneficial to man's interests.

Arriving in their breeding areas, the broad-wings seclude themselves on some wooded hillside if possible, near a small mountain stream that feeds into woodland swamps and ponds. Often the first indication of the bird's presence is its thin, high-pitched whistle that is often confused with the call of some small woodland bird. Much of the time the hawk itself is not seen because it is hidden on a leaf-shrouded perch. The thin whistle is heard as the protesting bird leaves its perch at your close approach to seek shelter a little deeper in the forest.

Although these hawks remain mated for life, they go through elaborate nuptial flights each spring. High in the sky, the birds make small circles, passing as close to each other as possible. Occasionally one hawk will allow the other to descend, and then plummet down in a diving arc, actually brushing the other in its flight. These aerial acrobatics are accompanied with a rather soft *Kreeeeeee* call.

The first part of May finds the breeding season at its peak and the birds building a new nest or refurbishing an old one. The nest is not a

well made one but it suffices. It is made of twigs and usually lined with chips of oak or pine bark or shredded red cedar bark. The broad-winged hawk does not seem to be in a hurry in constructing its nest; although both sexes work at it, their combined efforts add only a handful of material each day.

Two or sometimes three eggs will be laid. The eggs are basically white or cream in color, heavily laced with brown spots and blotches, about two inches in length and 1½ inches in diameter.

Incubation requires 24 to 25 days, and both parents take their turn. There are records of occasions when the female was killed after the eggs were laid and the entire job of incubation and the rearing of the young was taken over by the male.

After the young hatch, their development takes about another six weeks before they are fledged. Both parents take part in brooding the young. For the first week or two the young must be protected from the sun in the daytime, the chill at night and the rain at any time. Their feathers develop rapidly and brooding is not necessary after two weeks. Even when brooding is no longer required, one parent is usually in close attendance to the nest.

The young of all birds have a rapacious appetite, but "tis summertime and the living is easy." At first, whatever prey is fed to the young must be torn apart by the parents, but in a short time the young begin to do this job themselves, especially with soft-tissued creatures such as amphibians.

### Moving?

Be sure to send change of address to GAME NEWS Circulation Department, P. O. Box 1567, Harrisburg, Pa. 17120. Send both new and old addresses; allow six weeks for processing.



Before the young leave the nest they are able to swallow some of the smaller prey in its entirety. Such food goes into the stomach area where digestible portions are extracted by the acids and the undigestible portion is regurgitated in pellet form.

Young broad-winged hawks are very active and climb about in the nest. At an early age they grasp the nest with their feet and flap their wings, strengthening the flight muscles upon which they will soon be so dependent. This activity and training pays off, and by six weeks of age the young are usually airborne. But being able to fly and being able to fend for themselves are two entirely different things, and young hawks are dependent upon their parents for food for at least another two months. Naturally, with this long rearing season, broad-winged hawks only have one brood per year.

#### **Tameness Is Typical**

One trait of the broad-winged hawk—its tameness—is so outstanding that it makes an identifying characteristic. The broad-wing can probably be more closely approached than any other hawk in the country. It might seem that this happens because it is a wild area bird and is unaccustomed to man. Yet, other wilderness hawks, such as the goshawk, will take to flight at the first glimpse of a human. It is not that the broad-winged hawk is not alert, because it is; it quickly spots anything that moves within its fantastic eye range. And it is not that the hawk is overly curious, because it will not approach a disturbance for a closer look. Apparently the broad-winged hawk is just a “tamer,” less suspicious hawk than the rest of its kin.

It is interesting to speculate on what factors bring the broad-winged hawks together for their fall migration. These hawks have been widely scattered all summer and yet, like iron filings drawn to a magnet, they are pulled to their flyways about the first part of September. By the middle of the month

### **GAME NEWS Binders Available**

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their migration is on in full swing and thousands head south. They sometimes fill the sky like a swirling whirlpool of leaves in collections called “kettles.” Even during migration, sociability is not a factor in the concentrations. What is a factor is the ease with which their migration can be made along Pennsylvania's concentrating mountain ridges.

Their flights may be as high as 5000 or 6000 feet, or they may be so low that, from the 2000-foot ridges of the Kittatinny, you can look down on them as they soar by. The weather is a tremendous factor and a strong northwest wind is almost always laden with broad-wings.

Unlike smaller song birds, which often migrate at night, the hawks always migrate during daylight hours. The uplifting thermals are stronger during the warm days and, because the hawks always hunt by daylight, they can find food as they migrate. In fact, much of a broad-wing's migration seems to be just an extension of its daily foraging trips. If the broad-wings hit inclement weather, their migration usually stops. These birds can go several days without eating with no ill effects. When the sun shines again, the thermals are back and the hawks continue their journey.

I only hope that all of our hawks and owls will soon receive the federal protection that is now being considered for them. A sky without wheeling hawks would be a very empty sky indeed.



**BOB COOPER**, East Prospect, with his 10-point, York County buck.



**RAY KRICHTEN** and son Randy, Spring Grove, with big York County buck.

## Some Pennsylv



**BOB MACUCH, SR.**, Hazleton, took this nice 8-point in Carbon County.

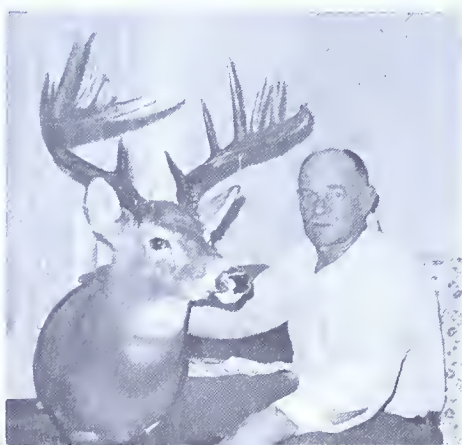


**DICK BRANDT**, of Gardners, left Mountain; right, Bill Stillman, R

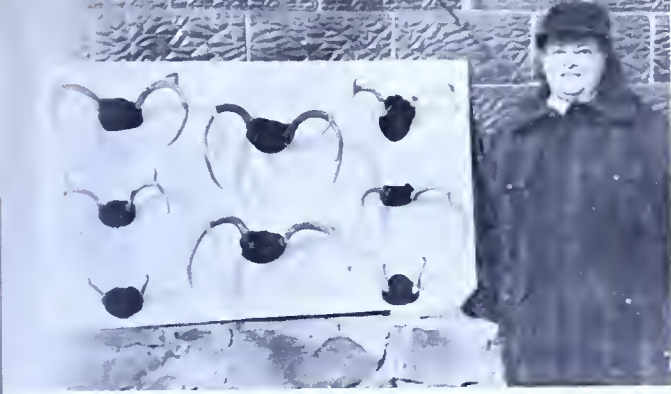
**JOE GERLESKY**, of Mars, and his 8-point from Indiana County.



**ED AGOSTINI**, below left, took beautiful 12-point Park, and his nice 8-point. Right, Don Auer, Erie







**MRS. ELLA HOUSTON**, Indiana, Pa., shows some of her trophies. She has been hunting since 1938, for squirrels and woodchucks as well as deer.



**STEVE RISH**, Kingston, with his Luzerne County 8-point.

## Whitetails



rophy on South  
his 5-pointer.



ington County. Center, Jim Seibel, Bethel  
55-lb. 9-point taken near Wattsburg.



**DENNIS POFF**, of York, left, and his 8-point from Tioga County. Right, Carmen Matteo, West Hazleton, and his first buck of six whitetails taken with bow.

**WALTER GEHRES**, Sandy Lake, and big 10-point taken in Mercer County.





# FIELD NOTES



## Too Early

**SULLIVAN COUNTY** — While returning from Scranton on February 24, I saw what, at first sight, looked like a large housecat walking through the snow on Russell Hill along Route 87 in Wyoming County. When I got closer, I was surprised to see it was a large woodchuck. Guess this feller thought spring had arrived early.— District Game Protector D. J. Adams, Eagles Mere.



## Pretty Expensive

**LUZERNE COUNTY** — Last February I was called to Lake Silkworth on a skunk complaint. The lady was disturbed because the skunk under her trailer was leaving an odor daily. Someone had told her to use moth balls and, if that didn't work, try shrimp by placing them a greater distance from the trailer each day until the skunk could not find its way back. This did not discourage the skunk. Maybe she should try lobster tail?— District Game Protector E. R. Gdosky, Dallas.

## What to Do

**CLEARFIELD COUNTY** — It's amazing what little effort is required to start a comeback for bluebirds. A good project for the winter months next year, when the snow is deep and it's too cold for those outside activities, might be to spend some time in your workshop building houses for bluebirds. Several friends have had nesting success as a result of placing bluebird houses around their home and they tell me the bluebird is a much welcomed neighbor. — Land Manager J. F. Ramsey, Penfield.

## Good to be Alive

**TIOGA COUNTY** — Wildlife is a living testimonial to the arrival of spring. Bear tracks observed near Arnot; groundhogs digging out their dens; waterfowl pausing to rest on their way north; the arrival of hawks, turkey vultures, songbirds and others, and the seemingly sudden appearance of deer and turkeys on the forest edge. It's a great time of the year.— District Game Protector J. K. Weaver, Mansfield.

## Travels With Quail

**SNYDER COUNTY**—Last March I received several calls reporting a hen pheasant with a brood of chicks near the Old Herman School. Deputy Randall Hackenburg investigated and found a hen pheasant traveling with a covey of quail. I wonder if the pheasant takes a place in the roosting circle?— District Game Protector K. W. Dale, Middleburg.



## What's That Word Again?

**CLEARFIELD COUNTY**—Speaking to the sixth grade students at the Hubert Street School in DuBois concerning wildlife, ecology and related subjects, the conversation turned to our national emblem, the bald eagle, and its unfortunate decline in recent years. Hoping to prompt discussion on hard and persistent pesticides, I asked if anyone knew why the eagle was now in trouble. I was amazed when one youngster pointed out that in years past many bald eagles had been shot in mistake for golden eagles, as the immature bald eagle greatly resembles the golden species, and in fact for this and other reasons the golden eagle is now protected by Federal law. Delighted that a 12-year-old was so well versed on a conservation problem like this but still hoping to get into the more severe problems of DDT, etc., I remarked, "Yes, that is correct. However, today there is a more pressing problem and it deals with chemicals." The words were hardly out of my mouth when a young fellow began beating the air with up-raised hand. "I know, I know—it's inflation!" Funny, indeed, but believing that the young man was on the right track and had merely used the wrong word (after all, it's on the front page of the newspaper just about every day!), I see a beautiful pun here when you stop to think that the bald eagle appears on many American coins and paper monies.—District Game Protector G. J. Zeidler, Rockton.

## In Two Hours

**SUSQUEHANNA COUNTY**—While checking fishermen with Waterways Patrolman Richard Roberts between 10 a.m. and 12:30 p.m. on March 21, we observed 42 flocks of geese winging their way north.—District Game Protector N. J. Forche, Montrose.

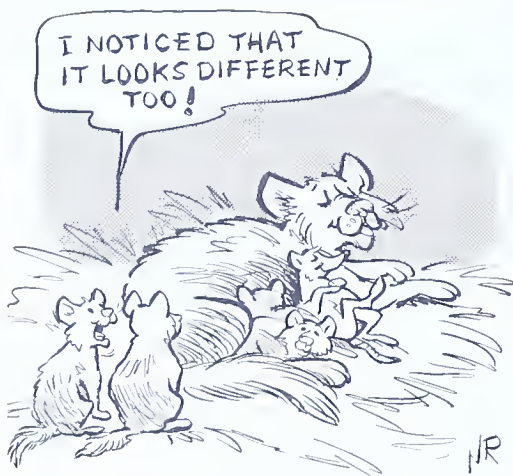


## Clean Shaver

**LYCOMING COUNTY**—One local sportsman seemed quite concerned over the fact that he found quite a few turkey beards near one of the feeders. Seems as though the toms were discarding their beards to antagonize the spring turkey hunter, since only bearded birds are legal then. Who said animals are dumb.—District Game Protector R. G. Clouser, Williamsport.

## Don't Mess With Him!

**INDIANA COUNTY**—At Yellow Creek State Park a fellow told me of an unfriendly ringneck he had encountered. While riding his motor-scooter in his field, he noticed that every time he rode into a particular corner of the field, a ringneck would start to chase his scooter. The ringneck would chase him to the same spot in the field and then stop and strut back to where the chase had begun. After this happened several times, the cyclist decided to stop and call the ringneck's bluff. The ringneck promptly began to flog the man's boot and his scooter. Remembering the saying about discretion being the better part of valor, the cyclist revved up his scooter and scooted! —District Game Protector J. E. Deniker, Indiana.



### Extra Warmth?

**ERIE COUNTY**—James Ferguson of Fairview—a good friend and neighbor—told me a recent experience. One cold morning, Jim went to his back porch for some seed to fill his bird-feeder. While there he passed the box on his porch containing his old mother cat which had just had a new family. Reaching down to pet the cat, he quickly withdrew his hand. There in the box was a large opossum curled up with the cats.—District Game Protector R. W. Meyer, Fairview.

### Pay Heed

**POTTER COUNTY**—Many signs are posted along our highways trying to stress one thing or another. Some are humorous but still get a point across. Consider this one for instance, "Drive carefully, our squirrels can't tell one nut from another!"—District Game Protector L. P. Heade, Galeton.

### A Pure White Dove

**CUMBERLAND COUNTY**—In March I observed a pure white dove along the Yellow Breeches near Grantham. I assume it was a mourning dove, as they are abundant in the area.—District Game Protector J. P. Filkosky, Mechanicsburg.

### Do It Now

**CENTRE COUNTY**—Parents, don't wait until the last minute to get your youngster to a Hunter Safety course! Each year some parents put it off and the youngsters are disappointed.—District Game Protector D. Sloan, Bellefonte.

### One Lucky Feller

**MIFFLIN COUNTY**—I received a call from James Donahey, McVeytown, that a gray squirrel wearing a white collar was utilizing his feeder. The squirrel was live trapped and it was determined that his collar was a ham bone with a one-inch hole in the center of it. Jim used a pair of cutters to remove the bone from the squirrel's neck and returned the little critter to the forest.—District Game Protector J. D. Moyle, McVeytown.

### A Real One!

**CENTRE COUNTY**—Overheard in a local sporting goods store recently: "That turkey gobbler I saw out in Decker Valley had a beard so long that he had to walk backwards when he was going uphill."—District Game Protector G. F. Mock, Coburn.

### Obvious

**FULTON COUNTY**—I have seen two road-killed crows on the highways recently. In both cases, it would appear, they were feeding on road-killed rabbits when hit. Road-killed foxes, once an oddity, can be seen quite frequently. In view of the ever rising toll in wildlife and human lives, it seems apparent that man has reached and surpassed sane and safe land speeds.—District Game Protector C. E. Jarrett, McConnellsburg.



## Good to Hear

**CENTRE COUNTY**—With eleven pairs of mallards sighted in one afternoon in the Black Moshannon area, our duck hunting should be tops this coming fall.—District Game Protector M. Grabany, Philipsburg.

## The Other Guy

**HUNTINGDON COUNTY** — On March 28 I witnessed two men unloading a pickup load of old plumbing materials, a water tank, siding and shingles, bricks, papers, etc., onto lands open to public hunting. While I was requesting information for the complaint, one man said, "Ya know what, you should arrest people for throwing paper along the highways." Why is it always the other guy who should be arrested? — District Game Protector, R. D. Furry, Huntingdon.

## Swans Rest in Pasture

**CUMBERLAND COUNTY**—Waterfowl were migrating about two weeks early this spring. During early March, ducks, geese and swans were observed on what seemed like every stream, pond and flooded field. One flock of whistling swans spent about 10 days on a flooded pasture before continuing north.—District Game Protector E. F. Utech, Carlisle.

## Patient

**BERKS COUNTY** — During dove season, I checked a veteran hunter's license. As I turned to walk away he said, "Thank you." I guess I had a quizzical look on my face because he explained that this was the first time anyone had checked his license in more than 40 years of hunting.—District Game Protector K. M. Zinn, Wernersville.

## More Trappers

**MONTOUR COUNTY**—Last season I found the regular trappers were joined by others who came out of retirement and some who were trying the sport for the first time. The unusual open winter and the demand for furs resulted in vigorous trapping activities. Also, fox calling with electronic callers at night has become a popular winter activity. — District Game Protector R. W. Donahoe, Danville.



## A Rude Awakening

**CLEARFIELD COUNTY** — I was summoned to the Shawville Coal Company where, while working with a bulldozer, they had accidentally uncovered a hibernating bear cub in its winter den. When I arrived on the scene, the cub, which was only slightly injured from its encounter with the bulldozer, was very much awake. With some difficulty we managed to tie it up and I took it to my headquarters. The bear was kept under observation for several days to make certain its injuries were not serious enough to hamper its return to the wild. The bear was then released in a suitable area to find another winter home, apparently none the worse for its encounter.—District Game Protector C. L. Keller, Clearfield.

## How It Goes

**ERIE COUNTY** — During summer and fall, many hunters spotted a real nice buck on SGL 109, and in archery season it was common to find at least several cars parked near the field the big buck frequently visited. The archers had no luck in harvesting him. Big game opened and the same thing happened. Mr. Buck eluded the gunners too, but toward the end of the second week of the season a motorist connected with him on Route 97. The buck was a real nice 11-point.—District Game Protector W. A. Lugaila, Waterford.



## No Rabbits Stocked

**MONTGOMERY COUNTY** — Recently on Game Lands 234 near Linfield I met two gentlemen with four beagles. I asked them if they had any chases and they replied, "You people must have stocked a lot of rabbits here recently because we could have shot three rabbits at one time." It was easy to see by the pooped condition of the beagles that rabbits must have been plentiful. These gentlemen were surprised to learn that no rabbits had been released here since the winter of 1971. I explained that with proper food and cover, you don't have to stock to have a good supply of game.—District Game Protector H. T. Nolf, Telford.



## Pumpkins or Punkins?

**MONTGOMERY COUNTY**—While cleaning my office, my wife came across some rifled slugs which interested my five-year-old daughter. "What are those?" she asked. My wife said, "Punkin balls." "Oh, I know!" my daughter said. "You use those to shoot punkins."—District Game Protector B. J. Schmader, Collegeville.

## Something to Think About

**INDIANA COUNTY** — Pennsylvania's violators don't have it so rough. In Utah the fine for possessing a loaded gun in a vehicle can be \$300 and six months in jail.—District Game Protector J. E. Deniker, Indiana.

## Unusual

**LYCOMING COUNTY** — The Friday before deer season opened, a lady near the Fairfield Methodist Church not far from Montoursville saw two buck deer fighting. After quite a round the one 4-point went down and couldn't get up. The other 4-point then trotted off. Sensing that something was wrong, she called Deputy Shearer, who found that the buck had a broken neck. It had to be destroyed. Scenes like this are rare and it is rarer yet for anyone to observe them.—District Game Protector R. G. Clouser, Williamsport.





# CONSERVATION NEWS



By Ted Godshall

## Game Commission Spending Cutback

**T**HE Pennsylvania Game Commission has directed staff personnel to devise plans for quick and drastic cutbacks in all spending and services. The reins on expenditures have been tightened considerably during the past ten months due to the deteriorating situation in the status of the Game Fund and receipts which have fallen short of projections.

Current indications are that the Game Commission will be receiving about \$12,018,000 during fiscal 1971-72. In order to maintain the present quality of hunting, the Commission will be spending about \$12,679,000, or operating at a net loss of about \$661,000.

Not only are receipts for this fiscal year falling short of projections, but the outlook for the 1972-73 fiscal year also shows that income next year will be below revenues for the current year.

Receipts for fiscal year 1972-73, starting July 1, are expected to be about \$11,650,000, and best current estimates are that spending during the same period will total about \$13,900,000, a difference of \$2.25 million.

A large part of the increased expenditures for the 1972-73 fiscal year will include the cost of labor contracts currently being negotiated.

If spending exceeds revenue by the projected amount, the Game Fund will contain only about \$1.75 million on June 30, 1973. Since expenses are currently running in excess of \$1 million per month, the Game Fund could be insolvent by August or September of next year (fiscal 1973-74 receipts will



**THIS PHOTO**, taken by James Orr, Sr., Johnstown, shows a highly unusual sight—a Pennsylvania black bear with two light-color-phase cubs. These bears were seen by Mr. Orr and some friends over a period of several months.

not be deposited in the Game Fund until October, 1973).

Several categories of Game Fund receipts have shown decreases in the past year.

From July 1, 1970, until April 1, 1971, the Game Fund received \$2,573,785 from the sale of nonresident hunting licenses. From July 1, 1971, until April 1, 1972, the Game Fund received \$2,506,892 from nonresident licenses.

At the time the price of the nonresident license was increased last

year, a number of persons claimed that it would produce an additional \$1.5 million for the Game Fund. Instead, the revenue has dropped almost \$67,000.

The Game Commission had warned that a nonresident hunting license price increase, without a corresponding hike in the resident license fee, could produce a sharp decline in the sale of licenses and possibly even a decline in revenue, despite claims to the contrary. It now appears that this is exactly what happened.

Each year when hunting license revenues begin to be received in October, the money is put into short-term investments which are redeemed as needed, with accumulated interest. From July 1, 1970, until April 1, 1971, the interest totaled \$414,225. From July 1, 1971, until April 1, 1972, the interest totaled only \$260,012, a drop of 37 percent.

Overall, in the last two years the cash balance in the Game Fund has dropped by about \$2.5 million.

Staff recommendations for cutbacks in expenditures and services will be presented to the Commission for action at its June 1 meeting. Reductions in operations can only result in fewer opportunities for hunters and other outdoorsmen to enjoy their pastimes. Prime targets for cutbacks are expected to be in the area of game farm propagation, land acquisition and development, maintenance, and management of hunting areas.

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## **Snake Hunt**

The Second Annual Clearfield County Snake Hunt, sponsored by the Old Town Sportsman Club, will be held on June 17. Registration at 7:00 a.m. at the Clearfield Driving Park, Clearfield, Pa. Rattlesnakes, copperheads and blacksnakes will be collected. No snakes will be killed. Trophies will be awarded in various categories. All persons interested are welcome.

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## **No Raccoons to Be Sold**

The Game Commission has received a number of letters expressing opposition to "the live trapping and sale of raccoons to out-of-state sources." These letters apparently were caused by the Commission's consideration, some months ago, of this action to help solve the problem of extremely high raccoon populations in limited areas of the state. This was never considered on a statewide basis.

After fully studying this proposal, it was decided that it should not be implemented. No effort is being made or sponsored by the Commission to legalize the exportation of live raccoon at this time. If at some future date the Commission chooses to pursue such legislation, the Pennsylvania Federation of Sportsmen's Clubs and all affiliated memberships or interested parties will be so advised and given the opportunity to express their opinions on the act.

## ***Big Fellows***

The giant otter of South America averages from five to six feet from nose to tail tip.



# Game Supply Linked to Cost of License

A FEDERAL survey on the character of hunting and hunters has concluded that sportsmen will have to be willing to spend more money through increased hunting license fees for wildlife habitat or face a shortage of game.

The Census Bureau collected basic data from almost 9,000 sportsmen, and projections made by the Bureau and the U. S. Fish and Wildlife Service indicate that efforts must be stepped up in habitat acquisition, development and management.

Assistant Secretary of the Interior Nathaniel P. Reed, who heads the Interior Department's programs for fish and wildlife, said, "Sportsmen must be willing to pay as much for habitat through licenses and special taxes as they do for privilege fees and transportation. If not, they will find the rivers empty of fish, the skies empty of birds and the hills empty of game."

Reed points out that money spent for hunting licenses, duck stamps and other permits, which provide for habitat preservation and restoration and wildlife management, is the smallest percentage of hunting expenses.

In Pennsylvania, the relationship between hunting license fees and special privilege fees is badly out of balance, but there has been resistance to bringing the two into line.

Just about the minimum charge to be found anywhere in the state on a

regulated shooting ground is \$10. Many of the special shooting areas have a \$20 minimum charge. Yet resident hunters currently are able to purchase a hunting license for only \$5, plus a nominal issuing agent's fee.

The survey showed that the other major problem facing hunting is a shortage of available land. Demand far exceeds the supply nationally, and the federal agency says that a far greater percentage of the sportsman's dollar will have to go toward restoring a favorable balance between the amount of public hunting ground and the demand for it.

Several other interesting problems were also noted in the U. S. survey. Expenditures by sportsmen's clubs, including dues, have almost tripled in five years. Transportation mileage has gone up 24 percent in just five years. Expenditures for items such as guide fees, equipment rentals, etc., have increased almost 50 fold during the last 15 years.

Yet during that time, in Pennsylvania, hunting license fees have been relatively constant.

The Pennsylvania Game Commission is well aware of the increase in operating costs, and nearly a year ago asked the Pennsylvania Legislature to increase the cost of all hunting license fees. Nonresident fees were increased, but today's resident hunting license costs the same as it did in 1963.

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## But They Do Survive

When attacked by a dog or man, the opossum may remain motionless even while being mauled viciously. Biologists speculate that they may be in a state of shock.

## Specialist

The wing design (short and concave) of the pheasant enables it to execute a fast take-off but limits the bird where distance is concerned.



## Waterfowl Museum Open

The Pennsylvania Game Commission's Wild Waterfowl Museum at Pymatuning Lake near Linesville, Crawford County, will be open through November 30 this year, according to Ray M. Sickles, waterfowl management agent.

An attendant will be on duty, except on Thursdays and Fridays, to present information on Game Commission programs and activities.

About 300 mounted specimens, representing about 90 species, are on display at the museum. All of the specimens were collected at Pymatuning.

The waterfowl museum is located one mile south of Linesville on Legislative Route 20006.

Museum hours during June, October and November are from 10 a.m. until 5 p.m. Hours for July, August and September are from 10 a.m. until 7 p.m. Large groups planning to visit the museum should make reservations with Sickles at Linesville, RD 1, or by telephoning either 412-927-2199 or 814-682-2005.

About 375,000 visitors were recorded at the museum in 1971. More are expected this year.

## Record Duck Stamp Sales

Sales of federal migratory bird stamps (duck stamps) continue their steady rise in Pennsylvania and have set a new record, according to the latest figures available from the U. S. Fish and Wildlife Service. During the 1970-71 year, duck stamp sales in the Keystone State totaled 81,074, compared to 67,224 in 1969-70. The 1970-71 sales established an all-time record for Pennsylvania. Sales of duck stamps have climbed steadily in Pennsylvania since 1961, when 25,684 were purchased by waterfowl hunters.

### Sample GAME NEWS Copies

*Do you have a friend who is interested in Pennsylvania's outdoors but is not a GAME NEWS subscriber? Perhaps he'd like to see a copy. Send us his name and address and we'll be glad to mail him a free copy of a recent issue of the magazine. Hopefully, we'll get some new subscribers—and maybe your buddy will stop "borrowing" your copies!*



## Game Commission Sells Deer Hides for \$6,343

Sales of deer hides during the past year have netted the Pennsylvania Game Commission \$6,343.77. The average price paid for 2030 hides was \$3.12, the highest in years. The figure is well above the total of \$5,633.45 received for 1835 hides one year earlier, when the average price per hide was \$3.07. The hides sold were recovered by Game Commission personnel from whitetails killed illegally, lawfully for crop damage and accidentally on highways.

### ***418 Handgunners Harvest Deer***

A Game Commission survey shows that 418 hunters used handguns to harvest their deer during the 1971 seasons. Of these, 408 were resident hunters, and 10 were nonresidents. Eight archers took whitetails during the gunning seasons, while 2855 shotgunners were successful and 98,177 riflemen connected on whitetails.

### ***Just Plant One and Wait***

The natural life span of a redwood tree is not known. It is possible they do not die a natural death.

### ***Floaters***

Most species of ducks cannot fly during summer months when they are molting.

## Records Booklet Given With Subscription

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# HUNTER SAFETY EDUCATION



By John C. Behel  
PGC Hunter Safety Coordinator



**THIS GROUP OF YOUNGSTERS TOOK** hunter safety training at the Harrisburg Hunters & Anglers Club, under instructors Walter Wise and J. C. Hileman. It is the cooperation of sportsmen's clubs such as these, and schools, which has made Pennsylvania's training program so outstanding.

## Good Safety Record Compiled by Hunters

**P**ENNSYLVANIA hunters in 1971 compiled their best safety record since 1963, a Game Commission study shows. In 1971, there were 22 fatal hunting accidents and 373 non-fatal mishaps. The total of 395 is the lowest recorded since 1963, when 359 occurred. But in 1963 there were about 860,000 hunters in the state, compared to some 1,100,000 in 1971.

In 1970 there were 23 hunting fatalities and 432 non-fatal mishaps, for a total of 455 accidents.

Safety officials believe the reduction in the number of hunting accidents is due to the increased use of fluorescent orange safety material by hunters and the effects of mandatory hunter safety training for all youths under the age

of 16. No person wearing fluorescent orange was shot in mistake for game in 1971. In fact, no hunter wearing fluorescent orange has ever been shot in mistake for game in Pennsylvania.

For years the Game Commission has urged hunters to wear fluorescent orange while afield, and has appealed to the legislature to require hunters to wear fluorescent orange. Its value is proved by statistics.

Although many persons tend to think most hunting mishaps occur during deer season, the study shows this isn't the case. Ten fatal hunting accidents were recorded last year during small game season, six during deer season, and five while hunting woodchucks.



# A Digest of Information Compiled From Reports of Hunting Accidents in Pennsylvania in 1971

CASUALTY				AGES OF VICTIMS	
Fatal				Under 12 years of age	5
Self-Inflicted	4			12 to 15 years of age	60
Inflicted by others	18			16 to 20 years of age	100
Non-Fatal				21 years of age and over	226
Self-Inflicted	76			Age not reported	4
Inflicted by others	297				
SPORTING ARM USED				AGES OF PERSONS INFLICTING INJURY	
Shotgun	Fatal	Non-fatal		12 to 15 years of age	39
Self-Inflicted	1	24	25	16 to 20 years of age	60
Inflicted by others	6	257	263	21 years of age and over	125
Rifle				Age not reported	91
Self-Inflicted	2	22	24		
Inflicted by others	12	40	52		
Revolver				CASUALTY LOSSES	
Self-Inflicted	0	15	15	Sporting arm in dangerous position	16
Inflicted by others	0	0	0	Accidental discharge	74
Bow and Arrow				Richochet or stray	75
Self-Inflicted	1	15	16	Victim in line of fire	173
Inflicted by others	0	0	0	Hunter slipped and/or fell	24
				Hunter dropped sporting arm	8
				Shot in mistake for game	20
				Sporting arm defective	5
				Using sporting arm as club	0
BIRD OR ANIMAL HUNTED				PLACE OF ACCIDENT	
Upland Small Game	10	275	285	Fields	104
Deer	6	60	66	Brush	100
Bear	0	1	1	Open Woodland	60
Woodchuck	5	16	21	Dense Woodland	87
Others	1	21	22	Water	4
				Conveyance	8
				Camp	2
				Wood Road or Public Highway	30
SAFETY COLOR WORN BY VICTIMS					
Fluorescent Orange	93				
Red	162				
Yellow	9				
None	131				

SUMMARY OF ALL CLASSES OF 1971 HUNTING ACCIDENTS			
FATAL	22	NON-FATAL	373
		TOTAL	395

SUMMARY OF SAFETY COLOR WORN BY VICTIMS				
	Fl.	O.	Y.	R.
Victim mistaken for game	0		1	7
Victim not seen by offender	0		0	71
Color not factor in hunting accident	93		8	84

## They're Strong

Mountain lions can kill and drag away animals weighing more than 750 pounds, yet the male of the species ranges in weight from 145 to 225 pounds.

## Big Brother

Male offspring of the white-tailed deer weigh an average of seven pounds, females five pounds.

# Turtle Tactics

By Marian N. Baker



**THE WOOD TURTLE** is a gentle creature that makes a good pet. Specimens reportedly have lived 58 years. It is said to be the most intelligent of the turtles.

**W**HO HAS NOT been startled by the stealthy approach of some unknown creature of the woods as it makes its way from here to there in its native haunts? The rustle of the dry leaves brings you up short in your tracks. You move in the direction of the sound—it stops. You wait—it begins again. And there it is—a wood turtle. You see the sculptured shell supported on scaly, bowed legs and the snakelike head erect in a state of suspended animation, reminiscent of the position children take in that childhood game when the command is given, “Still water, no more moving.”

You may have picked up the wanderer and watched how quickly it

withdrew its head and clawed feet and folded its pointed tail sidewise beneath its shell, at the same time emitting a hissing sound. This is not any menacing hiss, but merely the expulsion of air from the lungs to make room in the crowded interior. If the turtle has been handled frequently, as is the case with the pair in our woodland, it does not bother to withdraw into its shell, but waves its feet wildly in an effort to secure traction and be on its way.

I never pick up one of these creatures without a sense of wonder at the timelessness of their ancient pattern. Turtles are members of a very old reptile stock and the only reptile with a shell. The fossil remains date back to the Triassic period of earth's history and strange to say they were not much different from present day turtles in their overall plan.

## Strange Skeleton

The skeletal structure of turtles, however, is so different from that of other creatures that scientists say they would have had difficulty restoring the fossil remains had they not had the living pattern to follow. The upper plate, the carapace, and the lower one, called the plastron, would have been puzzles in themselves, as would the fact that the ribs are outside the hip and shoulder girdles—the only animal which has this arrangement. Peculiar as this reinforced armor may seem to us, it has proven its worth by serving the turtle clan some 170,000,000 years. While groups such as the mammals produced and discarded models at a great rate in the evolutionary race, the turtles arrived today with the same old chassis still in good working order. It brings to mind the fabled race of the tortoise (a terrestrial species of turtle) and the hare, when the con-



servative and methodical tortoise had the edge.

In our personal woods the two common representatives of the turtle clan are the wood turtle and the box turtle. In fact, these are the only two species I have ever found there. Both are gentle and make good pets. They share the common trait of having a restricted home range. We see the same ones again and again. Perhaps this is the reason it has been possible for naturalists to obtain records of these species' maximum ages. Captive specimens of wood turtles have been reported to live 58 years. The box turtle has a record of 138 years.

The wood turtle, which reaches a size of nine inches, is said to be the most intelligent of the turtles, judging from its ability to solve mazes. Its carapace is low and keeled (has a raised ridge down the back) and is made up of plates with raised concentric rings. This alone is enough to distinguish the wood turtle from all others. The plastron is concave in the male, flat in the female. It is not hinged as it is in the box turtle, so the owner is never completely hidden when it goes into seclusion. You can still see the horny, notched beak and the orange shading of the under parts of the body.

The box turtle grows to a size of six inches. The carapace is high and only slightly keeled, giving a hump-backed appearance. The plastron is hinged crosswise about the middle. This enables the turtle to close its shell completely, both front and back, after drawing in its appendages. The young of box turtles do not have this hinge.

Once, in the midst of a pouring spring rain, I saw a wood turtle plodding along the gravel path near the cabin. This same turtle had been around for several days, always on the move, very preoccupied and apparently searching for something. Occasionally it stopped and gave some tentative sweeps with its front feet in the loose gravel, much like a swim-

mer using the breast stroke. It showed no fear when I walked by or even when I picked it up to admire the shell with its plates of concentric rings and brilliant orange of the underneath sides of the legs and neck. The plastron was flat, indicating it was a female.

Later on in the day, with the rain still continuing, I came upon her digging in the gravel of the road. The hole was perhaps an inch deep, so she must have been working for some time before I noticed her. She was using first one hind leg and then the other to excavate a hole. The motion was slow and methodical. The clawed foot would take a small scoop of gravel and place it off to the side in the rear, then return to a standing position and the other leg would repeat the process on the other side. Never did she use the same leg twice in succession and never did she once look back to see the results of her labor. This continued for half an hour. The hole was deep enough now that the short legs had difficulty in reaching new gravel, but still she continued the same routine even though the results were negligible.

### Crucial Moment

I should have known that the crucial moment was arriving, but it was lunch time and I was the cook. I went into the cabin, started a fire in the wood stove, put in wood that I hoped would not burn too fast or too slowly for my purpose, and returned. In that interval of 20 minutes, the eggs had been laid. Now the process was in reverse, and with the same slow motion she was returning the gravel with first one back leg and then the other. With claws closed she tamped the returned gravel with the sides of both legs before each addition, much as if you held both hands behind you and pressed down with the wrists and closed thumbs.

As the semicircle of gravel was returned it grew harder and harder to reach the last remnants and the legs gave the appearance of someone grop-

ing in the dark. They would wave about with claws extended and finally come down on a very small amount. The tamping was the same for any quantity, no matter how small.

At last it was finished and she crawled away with never a backward glance. After working for so long in the rain and wet gravel, her legs seemed stiff as she hobbled into the woods—or perhaps I just felt that way myself.

That was in May. September came with apparently no action in the nest. Maybe there were no eggs there; after all, all the ground had been returned to the hole. So I dug down to see what was going on. In doing so I broke the topmost egg. It contained a well developed baby turtle. I hastily recovered the remaining eggs. There were at least six. My misguided efforts were soon followed by those of a skunk. So that nest was a total loss. You have probably seen the remains of such dinners on dry hillsides where the discarded shells like tough, white puff-balls provide mute testimony to the feast. But who am I to condemn the skunks?

In the spring the wood turtles leave the water and banks of streams where

they have spent the winter and become active on land, living on berries and other plant growth, particularly mushrooms, as well as earthworms and insects. I have found them devouring mushrooms with the telltale evidence on their mouths and the crumbled remains of the mushroom on the ground. I have watched these turtles for hours on end in the deep pool inhabited by black-lined dace, chubs and fingerling trout, but have never seen them attempt to catch any of these.

The wood turtle is now the only representative of the turtle clan in our woods. Time was when the box turtle was here too. What has happened to it I do not know. For many years any box turtle that I found had one or sometimes two feet amputated so that it was forced to walk on short stumps for legs. I never was able to discover what was causing this. Turtles in captivity will nip off the legs of their companions. Do different species resent the presence of others in their home territory? Whatever it is, the results seem to have been the removal of an ancient and interesting character from our woods, and our environment is not the same with him gone.

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## **Pole Trap Illegal**

The use of pole traps has been outlawed in Pennsylvania. Under an amendment to the Game Law, effective April 10, it is unlawful to use a pole trap to capture wild birds or wild animals of any kind. Pole traps are non-selective, and many desirable species have been taken in the past in efforts to control individual predacious birds causing damage.

## **Booklet on the White-Tailed Deer**

All persons interested in deer will find the booklet, "The White-Tailed Deer in Pennsylvania," of great interest. Written by Stanley E. Forbes, with the assistance of Lincoln M. Lang, Stephen A. Liscinsky and Harvey A. Roberts, all wildlife biologists, this publication gives a great deal of information which formerly was unavailable to the general public. The whitetail's clan, home, enemies, conflicts, benefactors and predicted future are covered. General topics include growth rates, antler development, reproduction, population structures, sex and age ratios, reproduction potential, and similar topics. This 40-page booklet may be ordered from the Pennsylvania Game Commission, P. O. Box 1567, Harrisburg, Pa. 17120. Price is 50 cents delivered.



# Backyard Cooking . . . on Wood

By Les Rountree

**T**HE TRIED and true way to build an outdoor fireplace at a temporary campsite (as any 14-year-old knows) is to arrange a semi-circle of stones and have at it. An old and simple way, to be sure, and one that has probably been used since the cave man first learned that cooked meat was easier to chew than raw meat. Of course, the cave man did nothing more than impale some chunks of hairy mammoth or sabre-tooth tiger filets on a sharp stick and prop them over the flame. Worked too! We have learned to add some refinements to this arrangement. Metal grills, wire mesh or sometimes steel rods make holding the meat a little easier, but the basic idea is still the same. The popular thing to do these days is to make our fire in a metal dishpan which we call a charcoal grill and substitute a hatful of little squares with rounded-off corners for real wood. That's progress! Or is it?

I fell under the spell of processed charcoal briquettes too. I've used a ton of them in the past and probably will use more in the future (unless I can find some real honest-to-goodness natural charcoal) but this summer I'm going to spend more outdoor cooking time trying out different kinds of wood for my outdoor barbecuing. A camping trip isn't a camping trip unless some meals are prepared over an open fire, but this column is aimed at the backyard steak sizzler too.

From May through October I do a pile of outdoor cooking in my backyard as well as when on safari. If you eat enough of the charcoal broiled meat that comes from the suburban crematorium, you will eventually discover that it all tastes pretty much alike. The pork, fish, steak and hot-dogs all seem to offer a rather "coaly"

sensation that one can tire of. Is there an escape from this backyard tribal rite? You bet! The answer is to use real wood. The hot-shot campers knew it all along and so did I. It's just that, like other busy Americans, buying a sack full of processed charcoal cubes is the easy way out. A squirt of fire starter and *POOF!*—it's ready to go.

The outside fireplace with an open top or a metal cooking grill is the ideal setup if you intend to try real wood. Takes a bit longer to get the fire ready for broiling a T-bone but the effort is well worth it. The idea is to allow the fire to burn down to maybe a four-inch thick bed of red coals that will cook the meat evenly and not ignite the juices. Under normal circumstances, if the wood is not wet and the wind is not blowing too much, this fire preparation will take about an hour. Even with charcoal you should wait at least that long for

**STEAKS ARE A favorite outdoor food, often cooked over charcoal, but they can be done equally well over coals of hardwood, preferably hickory.**





**METAL TONGS ARE** ideal for turning steaks. Forks should never be used, as they puncture the meat and let out the flavorful juices.

the smell and taste of the fire starter to subside (never cook over briquettes until they turn an even gray color).

We mentioned steak, so let's assume a T-bone about an inch thick is the morsel in question. How far away from the fire should it be? There is no absolute answer when cooking outdoors, but here's a good rule of thumb. The steak should begin to make a sizzling noise as soon as you lay it on the grill and it should turn dark brown rather quickly . . . within two or three minutes. Not black, mind you, but dark brown. If it doesn't turn dark brown, move the steak closer to the fire. Allow the steak to cook for about seven minutes and then flop it over with tongs. Never use a fork. Impaling it with a fork or any sharp instrument will allow the flavorful juices to drip out and there goes the taste. (To

digress, anything that's being fried, broiled, baked or roasted should never be stuck. The flavor that's in meat should stay in and not ooze into the pan or the fire.) Once the steak is flopped, allow it to cook for about two minutes less on the second side. It won't require as much cooking time since it has already been warmed clear through. For my taste I enjoy steak well seared on the outside but favoring a rather strong pink on the inside. This is a true medium rare and, I might add, most difficult to obtain in the majority of restaurants.

The fire for outdoor barbecuing should be built with the right kinds of wood. Use the smelly stuff and the meat won't taste good at all. The absolutely wrong kinds are hemlock and pine of any kind, and I'm not too fond of oak, although some like it and swear they enjoy the flavor. Avoid any sort of wood that has been treated with creosote or other wood preservatives. I got involved with a cookout one time which featured chops cooked over some cut-up telephone poles. We almost wound up eating the wood instead.

Hickory is the absolute best cooking wood, but there's nothing wrong with well seasoned maple, beech, apple or birch. Green woods are sometimes okay, but the extra juice that seeps from a freshly cut stick of cherry or sweet birch is a bit too fragrant. If wood is to be cut specially for the backyard cooking chores, cut it at least a year in advance . . . two years would be better. It will probably cost you a few bucks but a commercial wood supplier will be happy to provide you with some custom cut lengths of a specific species. Don't expect him to







**MANY PUBLIC CAMPGROUNDS** have concrete rings to contain fires. Sometimes a grille can be arranged over a portion of one, with a bed of coals beneath, for cooking.

have it on hand at a moment's notice, though. He'll probably have to look around awhile to find the right tree.

If you don't happen to have an outdoor fireplace you can still enjoy the fun and good eating of hardwood cookery in the ordinary backyard barbecuer. You must split the wood into thinner sticks to allow the air to move around them while burning. By doing this, even for the larger fireplaces, the wood will burn down to coals much quicker. Stir the wood sticks around a bit until you have an even bed of glowing, red coals all over the bottom of the fire pan. They won't stay that way too long because of the pan's shallow configuration, but that doesn't matter. It doesn't take long to cook most meats anyway. If it is a mite on the cool side when the meal is ready to be started, cover the main course with a sheet of aluminum foil. This prevents some of the heat from escaping.

The most common mistake that outdoor cooks make is to cook meat, and other food for that matter, much too

long. The heat from an open fire is quite intense at times and a tender steak, chop or cut-up piece of chicken should never take more than a short time to cook through. Meat should still be juicy. Those annual affairs that go under a variety of names like Fireman's Barbecue and The Little League Benefit Chicken Sale (you know the type) usually get my donation but hardly ever my applause. The chicken has been cooked so long and squirted so often with some concoction that to me it always tastes like a lemon-drenched tennis shoe. I have nothing against the Little League or the firemen, but I wish they'd cook something other than chicken.

There are some excellent prepared barbecue sauces on the market today, but in case you want to put together a really dandy one, here's how:

Combine  $\frac{1}{2}$  cup of butter or margarine, 2 tbs. of vinegar, 1 tsp. of sugar, 1 tsp. of salt, 1 tbs. of steak sauce, 1 tsp. onion salt,  $\frac{1}{2}$  tsp. celery salt,  $\frac{1}{4}$  tsp. paprika,  $\frac{1}{4}$  tsp. pepper and  $\frac{1}{2}$  cup water. Heat until the butter

melts. Brush the cooking chicken several times.

Beef and pork spare ribs are also great when cooked over hardwood fires. They'll probably need covering up with foil and will have to be turned and brushed at least three times on a side. An electric spit is a worthwhile luxury for these delectable morsels but the manually operated spit works fine too if you remember to turn it every five minutes or so. Here's a sauce for ribs that works fine for beef or pork:

Heat in a pan 2 cups water, 1 cup catsup, 1 sliced onion,  $\frac{1}{2}$  cup Worcestershire sauce, 1 tsp. chili powder, 1 tsp. salt,  $\frac{1}{4}$  tsp. pepper,  $\frac{1}{8}$  tsp. Tabasco sauce and 1 tsp. lemon juice. Brush mixture on ribs every 15 minutes, for approximately an hour and a half.

The more mundane meats such as hamburgers and hot dogs take on a special flavor when roasted over hardwood too. In the case of hot dogs we

all know how to roast one with a sharpened stick and there have been times that nothing under the sun could have tasted better. Hamburgers require a holder, one of the little wire deals available at most ten-cent stores, or they can be laid on top of fine mesh grills. A word of warning—if the grill mesh is bigger than three-quarters of an inch, you're bound to wind up with a 'burger or two in the fire. It never fails!

Whole trout, bass, catfish or other fresh-water fish can also be cooked over a hardwood fire with great success. While I like to skin all fish (except small brook trout), the outdoor grill cooker should leave the skins on. Fish cook very quickly and the skins will add a measure of protection. The skins brown up rapidly and form a hard shell that keeps the flavor in the meat. When the fish is cooked through the skin will peel off neatly and can be discarded. You can test the fish by

**IT'S SOMETIMES DIFFICULT TO GET good wood for cooking outdoors. Avoid evergreens and any kind that has been treated with creosote.**





pulling on the backbone with a pair of tongs. If the meat begins to separate easily from the bone, it's ready to eat. By laying the whole fish on a plate, the backbone will pull free and practically all of the bones will come out with it. Pour a dollop of melted butter over the fish and sprinkle with paprika. Speaking of paprika, look for the imported Hungarian kind. Up until a few months ago I thought that paprika was just for decoration. It didn't seem to have much taste. Not so with the Hungarian style! It's wonderfully scented and a perfect addition to fish.

With the more strongly flavored salt-water fish, tartar sauce is a better addition and it's easy to make your own. Here's one recipe that takes only minutes to put together:

One cup of mayonnaise,  $\frac{1}{4}$  cup pickle relish, 1 tsp. prepared mustard, 1 tsp. dried tarragon, 1 tsp. minced parsley, and a dash of garlic powder. Combine and chill until ready to serve.

### Try Lobster Tails

In view of their current price tag, we don't eat lobster tails too often at my house, but if your rich uncle pays for them, there is no better way to fix the big crabs than to barbecue them over hardwood. Thaw the tails, split them up the belly and lay them split side down on the grill. Cook for about five minutes, roll them over and brush on a mixture of butter and lemon juice. Let the butter soak in and then turn them back on the split side for another seven or eight minutes. It may take a bit longer than this depending on exterior conditions. Test by sticking a toothpick through the meat. When the wooden pick can be pushed in easily they're ready to eat.

If you happen to have one of the



**CHARCOAL BRIQUETTES** are handy to have in reserve for those days when it isn't possible to obtain wood for the old-fashioned kind of cooking.

really extravagant barbecuers that sports a dome-shaped lid you are equipped to cook whole chickens and roasts over charcoal or hardwood. These backyard pressure cookers actually smoke and cook meat at the same time, much as a regular smoker does it. I won't attempt to offer much advice about these because they all work a bit differently and good instructions are usually supplied with the units. These deluxe outfits are too bulky to carry on a camping trip but they are fine in a permanent backyard set-up.

I'm sure that some GAME NEWS readers are not campers, but I'm equally sure that it's a rare individual who can't be tempted into sampling the outdoor fare that can be cooked to perfection on hardwood coals. A sizzling steak or an octave of ribs coaxed to browned perfection has just got to be one of the ultimate delights known to man. To not like backyard cooking is, is, well . . . it's almost un-American!

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### Resourceful

The whirligig beetle is able to breathe under water with air bubbles it traps beneath its hard-shell wings before diving.

# TIME AND TEMPERATURE

By Keith C. Schuyler

*Photos From the Author*

**F**ORTUNATELY, it was a weekend when I received the telephone call from Chip. "Dad," he said, "the carp are in on the West Branch!" To a carp hunter, that could mean only one thing. The spawn was on!

We try to keep our eyes and ears open after the first of May, depending on the weather, so that we don't miss out on the run of carp when they come spawning into the shallow riffles each spring. Little else in archery matches the peak of the spawn for plain, unadulterated excitement. At special spots along the normally placid rivers, the gravel beds suddenly become alive with splashing fish that may go anywhere up to 50 pounds. The ideal spawning temperature for the water seems to be right around 65° F.

Those 50-pounders are scarce, but carp in the 5- to 25-pound range are fairly common. With proper tackle, you can have sport with the bow and arrow that equals almost anything in the total hunting scene.

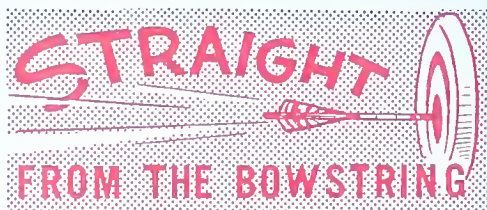
At this point there will undoubtedly be those who question why anyone would want to deliberately shoot anything just for the sport of it. To set the record straight, it should be pointed out that it is not unusual to drain a body of water just for the purpose of removing carp and other trash fish. The carp, not a native species, was imported from Germany years ago and is found in almost every open body of water in the state of Pennsylvania. Only landlocked lakes and trout streams too cold for this unwelcome foreigner are free of carp. Since it is a timid feeder, fishing will

never threaten the carp's existence anywhere. It's greatest nuisance factor is in competing for food with more favored species. In sluggish streams or lakes, it riles the water by rooting on the bottom and makes it untenable for vegetation and certain aquatic life. It is believed that its rooting disturbs the spawn of other fish. And, one big female carp will lay well over one million eggs!

## Before They Spawn

Consequently, the bow hunter who goes after carp at any time of the year is doing fishing a favor. If he can catch them before they spawn, the favor is enlarged by the destruction of millions of potential progeny. Although it is true that these youngsters provide food for game fish, there are sufficient other species to take over the chore that do not upset the aquatic ecosystem as does the lumbering old carp.

Most fishermen do not rate the carp much in the fighting department. However, since it frequently runs to large size and is extremely strong, any carp will give a fair account of itself. It makes long sweeping runs up and down the river and does not tire easily. Because its flesh is considered inferior to that of almost any other fresh-water fish in Pennsylvania, the





carp seldom is taken home except to show off to the neighbors. Some fishermen, as well as bow hunters, miss out on not using the carp for the excellent fertilizer its carcass provides when buried in the vegetable or flower garden.

Because of its known strength and sometimes prodigious size, the carp can still give a good account of itself even after being hit by an arrow. The type of tackle you use will determine to a large degree the sport that you can make available in hunting for carp. We lean to the use of spinning reels with fairly light monofilament, 8 to 12 pounds, to obtain the maximum sport. This usually means employing light wooden junk arrows to which is affixed a barbed head. By fastening the monofilament to the head, there is a fishing simulation of sorts, especially if the arrow shaft floats free after impact.

But, getting back to the day late last May when Chip called, it was an obvious invitation to go carp hunting. We went. At first glance, the West Branch of the Susquehanna River below Milton seemed peaceful and quiet. As they say in the westerns, "too quiet." Then, a telltale V at the edge of the grass lining a good gravel bed indicated that we were likely to be in business.

### **Just About Right**

Chip took the temperature of the water along shore and grinned up at me. "Just about right," he said, and a splash down the river confirmed it.

Although both of us were using spinning reels, and he was using junk wood arrows with a fishing head lightly attached, I wanted to test out some Sting-a-ree solid glass arrows and heads. These heads are heavy duty and will handle the biggest carp that swims. In fact, I later slammed one into a hammerhead shark that weighed 174 pounds and measured 8 feet, 4 inches—after it had been muscled to within four feet of the surface



**CHIP SCHUYLER checks temperature in the West Branch of the Susquehanna to determine if water is right for carp spawning. At 65 degrees, it's perfect.**

from the bottom of the Gulf of Mexico. We couldn't bait the sharks to the surface, and this one took a six-pound bonito on two huge hooks. Although the shark's spinning in the water broke the arrow, the Sting-a-ree head held, even though one of my companions put all his strength against the arrowhead. And, the barb barely penetrated the tough sharkskin despite the fact that I had sharpened the leading edges of the barb for the purpose.

Everything was go until I shot into my first carp, one of about eight pounds. It took off to the limit of my line into swift water. The pressure strained the 8-pound test monofilament, and I started to reel, carefully. The reel wouldn't work. A sudden burst of speed from the carp resolved the situation. It took my arrow and line—all of it.

Meanwhile, Chip was enjoying himself in roughly the same proportion that I was not. In desperation, I wanged another carp in shallow water,

line or no line. Before I could grab the protruding arrow, the carp took off straight across the river.

Occasionally, the arrow will strike a vital part, usually the spine, and there is no fight. Mine fought. And won.

On this trip in May, I had to content myself with taking a few pictures until we had the carp scared off in our hunting area. We went to Milton to refuel ourselves and so that I could buy a new reel, and line.

One of the problems attendant to carp hunting when the spawn is on is the water conditions. If rains raise the streams and muddy them, and also raise the temperature, spawning ac-

**CHIP SCORED HEAVILY** on German carp when he hit the spawning run on the North Branch of the Susquehanna. These big fish, regarded as "trash" by anglers, make fine game for archers.



tivity may pass almost unnoticed. At one time we had a friend who lived along the river who would keep an eye out for carp activity. Unfortunately, he is no longer available and we have to keep testing and checking.

At the peak of the spawn, carp lose much of their timidity and the action can be fast and furious. During the beginning and end of their mating, the fish are much more wary. Usually, however, if you find a school on a particular gravel bed, they will continue to work back after being frightened. Patience pays off.

One of the big thrills in such hunting is to see a heavy wake working its way up along the shore. It sometimes takes keen eyesight, particularly if the sun is throwing glare or the water is colored, but usually the heavy body of the carp can be seen, if only as a shadow.

It is amazing how much strength even an 8- or 10-pounder can exhibit after a solid hit. Carp actually can put up much more of a fight when struck with an arrow than when caught conventionally on a hook and line. Much more leverage can be exercised by the fish when the pressure is being exerted through its midsection than at either end. The fight may be shorter, however, because of the arrow damage.

#### Careful Stalking

Although the best action comes at the time of the spawn, there is good carp hunting throughout the summer after the water warms. It takes much more careful stalking, and shots are usually much longer. At the later times, carp will still venture into small eddies and along dropoffs of a few feet in depth. You can wait them out in areas where you know there are carp, or you can hunt them in the more obvious spots.

It is true to some extent, even during the spawn, that best daylight shooting is early and late. It is *always* true at other times. As soon as the



sun hits the water well, carp take off for deep water. This actually works to the advantage of the average archer who can get in on the best action before or after the usual work shift.

If you know that there are really big carp around, you may want to stake your success on heavy, solid glass arrows. You will need heads to match, such as the Sting-a-ree. A conventional bow reel, on which 50- to 80-pound test line can be wrapped, will probably guarantee that you will be able to land what you hit. On the other hand, a light saltwater rod equipped with 20-pound test or heavier monofilament on a reel capable of carrying 200 yards or more, behind your heavy hardware, will greatly increase the sport.

### Refine Your Tackle

Normally, any bow that you can shoot well will suffice for the average carp with average light tackle, but if you plan to go after the big bruisers, it is well to refine your tackle accordingly. Sharp points, which are tough to keep sharp after they have been banged around on gravel and rocky stream bottoms, should be employed. It takes a lot of drive to sink a barb through the tough scales and hide of a big carp. Unless too much pressure is put on the rod or line, a barb inside the fish will usually hold, but a complete pass through will provide double insurance against losing the carp.

Obviously, if you go to heavy lines and arrows, you need a bow strong enough to deliver. When shark or sting ray hunting, I always use a 50-pound bow and never less than 40 for big carp. Most of the shots are fairly close, but don't expect fish arrows to whisper off the bow like a target or field arrow. In fact, keeping the line (I use braided wire for sharks) free of the bow, your arm, and the reel, is a bit of a problem at times. If a fishing reel is used, there will be an accumulation of heavy line and/or wire between the reel and the arrow which



**HEAVY DUTY TACKLE** is needed for carp. Homemade head, top, didn't work (it planed), but Sting-a-ree head and arrow handles these fish well.

must be accounted for before each shot. If the reel is not set for free running, any line will break no matter how tough it is. It is well to keep a belt knife handy in the event you get tangled up with a heavy line or wire.

If you have access to gar shooting, you will appreciate the advice to keep arrow points sharp. A head which might go clear through the average-size carp can bounce off a gar's tough hide and scales. I had a bout with short-nosed gar in Georgia last year. We found that it took almost a dead-on hit to impale one of those toothy fish killers. An alligator gar, previously estimated at around 200 pounds, eluded us although it actually rocked our 14-foot boat without showing itself in waning light of one afternoon.

My personal preference for a time to hunt carp is early in the morning. The situation is a bit like deer hunting. The quarry is already in position at daybreak, comparatively secure in the instinctive knowledge that it can quickly escape to cover that puts you at a disadvantage. In the afternoon and evening, the quarry is moving from a position of relative security to one of known danger. Consequently, it will be much more wary and sensitive to any human movement.

Since water holds its temperature much longer than air, the cool of night seems to have little effect upon carp. So, once the water has warmed sufficiently in the season, carp shooting will continue indefinitely unless there is a period of sustained cool weather.

### **Ideal Time**

Of course, the ideal time to hunt carp is at night. This takes considerable preparation, depending upon whether you plan to hunt from shore or a boat. One of the most memorable carp-hunting trips I've ever enjoyed was a night foray with Guy Ekler on the Susquehanna River near Highspire which was duly recorded in the column (June, 1969—"Of Carps and Cameras").

Guy has equipped himself with a light on the end of an old goose-neck lamp which is powered by a regular car battery. As long as the light is turned on when it is *under* water, it will last indefinitely. A half-shade protects it from occasional bumps on the bottom, rocks and other assorted underwater debris. It will light up an area about six feet in diameter. When just drifting with the current, this makes for fast shooting. In still water speed can be governed to suit. The important thing is to keep the light *under* the water since any on top causes reflections which make it impossible to see. Further, a hot bulb immersed in water will break every time.

When hunting along shore, a lamp

which fits on the head is far superior to any other form of illumination. Carbide headlights such as used by coal miners are fine for the purpose. These lights permit the archer to keep both hands completely free, almost a necessity for any accurate shooting. In the absence of such individual lights, a pair of hunters can take turns shooting and holding a flashlight or lamp with good illumination. Only a carp hunter who has had to quit at a time when the carp are really moving into shore in late evening can appreciate the value of a light to prolong the fun.

Although muddy water usually signals the end of carp hunting until it clears, murky water *can* be an advantage. In such water, the fish will be less wary although it often takes excellent eyesight to spot them. Watch for the movement of weeds or other aquatic vegetation. Then move in carefully as close as possible since visibility will be minimal. You have to get close for this shooting.

At any time during daylight hours, a pair of polaroid sunglasses is a must. Glare from the water can prevent you from seeing a carp, or it may foul up your shot because of bad visibility.

It is frequently said of hunting that the best time to go is when you are able. But when it comes to carp hunting, you can increase your odds immeasurably by keeping check on the right time and the right temperature for the spring spawn.

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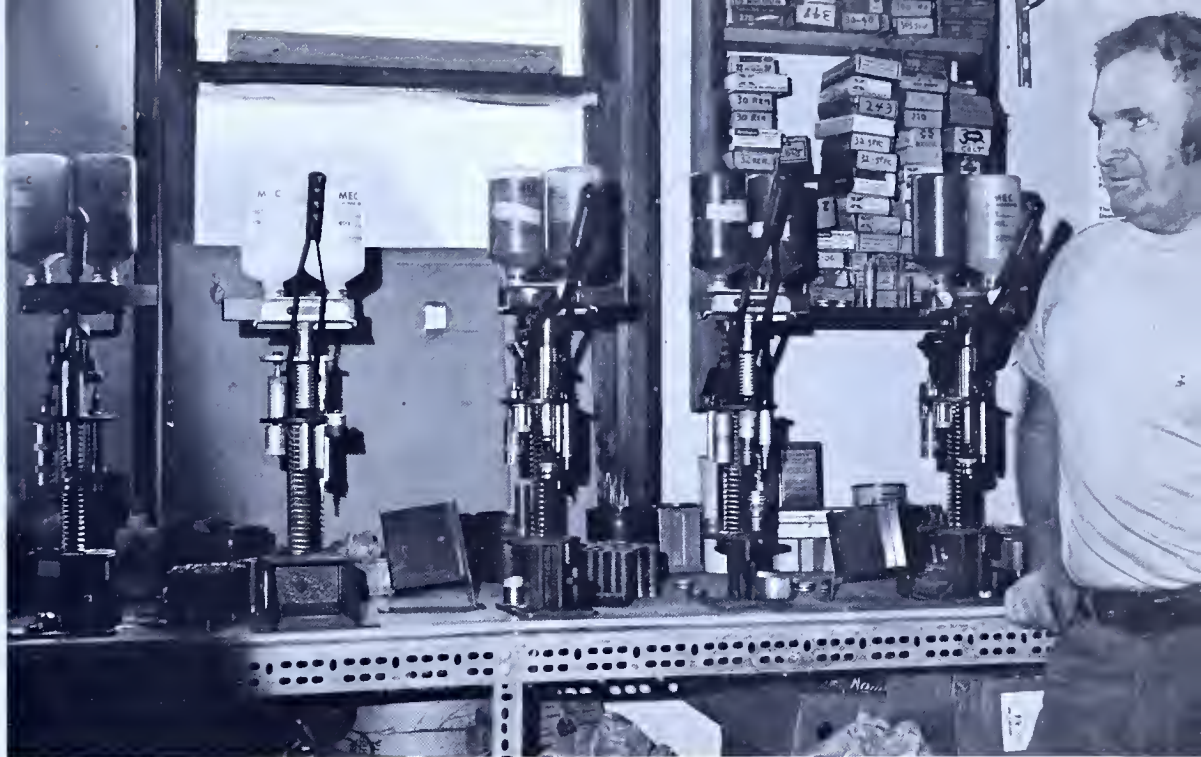
### **In Trouble**

The world's population of captive whooping cranes has been reduced to 21. About 60 cranes are believed to exist in the wild.

### **Always a Nonconformist in the Crowd**

Although a ground-nesting bird, the mallard duck has been known to build its nest in a tree.





**RAY MECHLING HAS LOADED OVER a half million shells, uses the MEC tools in various models with excellent results.**

## The Modern Shotshell Press

By Don Lewis

*Photos by Helen Lewis*

**"TELL ME THE** truth about the shotshell press you had pictured in the August, 1969, issue of *GAME NEWS*," the long-distance phone caller said abruptly. "You stated that with several fellows helping, you could turn out nearly a thousand rounds per hour, and even without help, up to 15 boxes could be loaded. That sounds farfetched to me."

I was stumped for a few seconds and couldn't come up with a quick answer. It was mid-summer 1970 when the man called and I couldn't recall which article was in that particular issue.

"You have me at your mercy; I can't remember which article you're talking about," I answered.

"I have the magazine right in front of me," he replied. "It's a Ponsness-Warren 800-B Size-O-Matic, and it says under the photo that it could

crank out loads faster than you could shoot them. Isn't that laying it on a little strong, or should I believe everything I read?"

"That's a decision you'll have to make, but I can tell you the Ponsness-Warren 800-B will do what I claimed. It does take a little while to get the swing of things, but once a rhythm is developed, the shells literally fly out. I've loaded a box every ninety seconds with two helpers and excellent cases. It's a perfect outfit for the avid trap or skeet shooter, and I would think that sportsmen's clubs could utilize this press's benefits."

The conversation ended almost as quickly as it had begun, as my last statement answered a question he was about to ask. I think it was the shortest conversation I ever had concerning shotshell loading presses.

There is hardly a week that I'm not



**THE TEXAN MODEL FW** press, available in all gauges, does a fine job and has a production rate acceptable to the average shooter.

asked to give my opinion on a certain press that claims to be capable of making perfect loads at a mass production rate. The market offers such a full line of presses that the new buyer is confused. The metallic cartridge handloader can use almost any type of press, but the shotshell loader should have a press that isn't too complicated and will turn out two to four boxes per hour without undue strain on the loader's part.

Shotshell loading differs somewhat from metallic cartridge loading, which is more precise and has more operations that require a certain degree of exactness. To get top results from a rifle cartridge, the loader has to do more than just resize and refill the case. I don't want to imply that shotshell loading is nothing more than sheer speed, but most of the operations are done by the press instead of the operator.

I normally weigh every fifth charge of powder when I'm loading hunting ammo for big game, and if I'm conducting chronograph or accuracy tests, I weigh every powder charge. The scattergun loader need not be so precise. His press can have a built-in powder charging bar that will hold the

powder charge weight close enough for satisfactory results. Also, the rifle loader installs each bullet by hand, while the shotshell loader dumps the shot charge with a quick flip of the charge bar.

Although this article is basically on shotshell presses, I feel that some discussion of loading in general should be helpful. Most rifle and pistol loading enthusiasts know quite a bit about metallic cartridge loading as a considerable amount of data and ballistic information has been available to them for decades, but to many there is still something of a mystery about loading paper and plastic shotshell cases.

Pressure is the demon that the rifle loader must always consider. When powder ignition takes place in a rifle cartridge, an enormous amount of pressure is generated by the gases as they expand in every direction. The cartridge case is held securely by the chamber on all sides and locked in place by the bolt at the rear, so the pressure takes the course of least resistance and forces the bullet through the bore. It's an established fact that no two rifles are exactly alike, and a significant difference in pressure can take place due to variances in throat dimensions, amount of twist, bore and groove diameters, chamber measurements, etc. Most rifle loaders tend to think that only by adding powder can the pressure be increased, but the truth is that one or all of the dimensional differences can and do change the pressure in a rifle or a handgun.

Pressures in some rifle cartridges routinely run to 55,000 pounds per square inch, but the shotgun shell will seldom generate more than 9000 to







**PONSNESS-WARREN'S** new Mult-O-Matic 600 tool, right, combines various features of the earlier Size-O-Matic and Du-O-Matic models. Tooling setup with 10 full length sizing dies is shown at left.



12,000 psi. Unlike the rifle or hand-gun, with its intricate inside barrel design and close tolerance between the bolt face and the shell head (head-space), the small dimensional differences among shotguns will have little effect on pressure. This does not mean that a 3-inch Magnum shell can be used in the chamber of a shotgun intended for the conventional 2 $\frac{1}{4}$ -inch length without considerably increasing the pressure. Rest assured, there will be a definite increase if this is done. However, pressures hold much the same among shotguns under normal conditions, when the same loads are used.

Whereas the pressures in a rifle can be changed drastically by a variety of dimensional differences in the rifle itself, the shotgun's dimensions have little to do with pressure changes. The startling fact is that in shotshell loading, pressure is built into the shell itself, and this must not be taken lightly.

Rifle and pistol loaders many times tailor special loads for their favorite varmint rifles or target pistols, and they have some latitude in selecting components. The shotshell loader, however, should stick to the components recommended in the loading manuals. Switching wads, for instance, can cause significant variation in pressures. The ammunition companies load to precise standards that are rigidly controlled by thorough and constant inspections and testing. The factory shell may be loaded to higher pressures than would be recommended for the home loader. This is

possible because the factory works with all new cases and can exercise tight control over all phases of the manufacturing. Since the factory designs and builds its own components, it can have exactly what it wants. In other words, if a specific type wad is needed to maintain compatibility with the manufacturer's design, then a special wad is built. The same holds true for the other components. But the handloader must stick with the components listed in the loading manuals. From testing I have done, I find that the loads suggested in the manuals will perform perfectly under normal hunting and shooting conditions.

#### **All Do Good Job**

Choosing a shotshell loading press is purely a matter of individual choice. All presses accomplish the same basic functions. Back in the 1800s and into the 1930s, shotshell loading was a ridiculous assortment of gadgets, and loading a box of ammo was a laborious and painstaking assignment which included a vast number of hand operations. The Eureka loading set available in the late '20s, for instance, consisted of five pieces of hand equipment. It was guaranteed to load either brass or paper cases and sold for just under two dollars, and I suppose back then, when time was not a factor, the hunter looked forward to spending two or three evenings loading enough ammo for one good rabbit hunt.

Since those early days, many new developments have taken shotshell loading from the category of slow,

cumbersome labor to a smooth, rhythmic style that will turn out a loaded round every three to five seconds with some of the modern progressive type presses. It may seem that I'm overstressing speed in shotgun loading but, unlike the rifle loader who must be meticulous and exact, the shotshell loader can enjoy the benefits of a fast, progressive press. While excessive speed must be watched, the modern press can easily turn out over 200 rounds per hour without undue stress on the press or operator. This appeals to the trap or skeet shooter who likes to reload four to six boxes per evening with some degree of speed.

Shotshell presses have progressed greatly in number and quality from the simple hand tool setups offered by Eureka and Lyman in the 1950s. By 1960, several firms offered presses for simplicity and speed. The day of loading an empty shotshell case completely by hand labor was fading. It was plain to see that the shotgunner should receive the same type of consideration as the rifleman.

A good handloading friend of mine, Raymond Mechling, who lives in Templeton in Armstrong County, years

ago began his shotshell loading career with the inexpensive MEC 250. By today's standards, this type of press is outmoded, but it was a great advance over the hand tool or the combination rifle and shotshell press that was previously available. Ray recalls that by really sticking with it, he could turn out five to six boxes per hour, but it was all sweat and hard work. He later used the MEC 400, and eventually graduated to the MEC 600 Jr. and 700 models. When I paid him a visit not long ago, his loading bench carried the 250, a 400, two 600 Jrs. and a 700 model. Ray found it easier to have a press for each gauge than to bother changing gauge setups.

Since he turns out many tens of thousands of shells per year, Ray is now considering going to the MEC Super 600, a progressive loader. During our interview, Ray made it clear that, with all his experience in handloading and the fact that he now loads for 87 calibers and gauges, he sticks strictly with the manuals when it comes to shotshell loading. Hearing this from a man who has loaded well over a half million rounds of ammo, I have nothing further to say to the shotshell handloader who is considering coneocting a new load.

### Many Improvements

From the demands for better presses, the manufacturers made improvements in more ways than just speed. For instance, the MEC 700 has the Pro-Check which programs the charge bar so the loading cycle is started and kept in sequence. It also operates the wad guide automatically for positive wad insertion and to keep an accidental charge of powder from being thrown.

Ponsness-Warren has a very impressive feature on their tools. Each case stays in a full length sizing die during all operations. This setup prevents the bulge that often occurs during the final crimping operations or if too much wad pressure is applied. I have



**EVEN AFTER SEVERAL loadings on Texan FW tool, 20-gauge plastic case shows an excellent crimp, doubtless will be good for a number of additional loadings.**



the 800-B Size-O-Matic progressive tool and the 375 Du-O-Matic single stage model. Both have loaded many thousands of rounds without a breakdown.

The 800-B has an automatically rotating 8-die head and turns out a round on every pull of the handle. The operator inserts an empty and a wad, and the press feeds the primer and drops the powder and shot charges. I keep mine set for trap loads, and it takes only a few minutes to refill a couple boxes of empties.

### **Moved Manually**

The 375 model differs in that the single shell holder must be manually moved from station to station and the powder and shot are dropped by moving a charging unit. I have die sets for the three common gauges, and in less than 10 minutes, I can switch from one gauge to another on this tool.

I have just been informed by Charles Warren, president of Ponsness-Warren, that the new Model 600 Mult-O-Matic will be available early this fall. From his explanation and several photographs, I reached the conclusion it should satisfy the most demanding shotshell loader. The 600 Mult-O-Matic appears to be a combination between the 800-B progressive loader and the 375 single stage. Its turret has 10 full length sizing dies and indexes automatically to the next station. The operator seats the primer, installs the wad in the wad guide and throws the powder and shot charges. The cases stay in the full length dies during all the operations. This press should have the necessary speed for trap and skeet shooters and its workmanship doubtless will be of the same high quality as the older P-W models.

There is no shortage of presses today. Pacific offers the excellent DC-155 APF that can crank out 200 rounds per hour, and the loader who is looking for speed can find it in the Pacific DL 366 loader. Pacific claims this



**SEMI-AUTOMATIC P-W 800-B loader easily turns out a case (500 shells) of reloads per hour. Setup here permits loaded shells to drop through hole in bench into a large box.**

press is capable of reloading 600 rounds per hour.

Bair has a number of good presses, including their latest, the Honey Bair. Also offered are the Glacier Bair, Brown Bair, and the Polar Bair, which happens to be another high speed press that could be used for club use much the same as the Ponsness-Warren 800-B.

A friend has been using the comparatively new Texan FW model for his 20-gauge shotguns and likes it very much. Texan Reloaders, Inc., has been making shotshell presses for quite a few years—I recall that Stan had another of their models back in the early '50s—and currently offers a half dozen models or so, including a 10-station automatic turret tool, the Model M11A, which delivers a loaded shell with each pull of the handle, once the stations are full. The FW tool requires that the user move the case from station to station as the various steps—decapping, repriming,

loading powder, shoteup and shot, and crimping—are completed. This is typical of single-stage tools. This doesn't permit an extremely high rate of production, but it's easy to load over a hundred shells an hour on this or similar tools, and this may be sufficient for your needs. The quality of shells produced on this type of tool, incidentally, is equal to that turned out on higher-priced models so long as you are careful not to bulge the cases by excessive pressure (usually at the crimping stage).

Other companies which I know manufacture shotshell presses of good design include Aeme, Herter's, Laehmiller, Hollywood, Lyman, Redding and Ljutie. Doubtless there are others, but I haven't had a chance to examine them. All of them have descriptive literature, price lists, etc., which you can write for (see addresses at end). Both Pacific and Lyman sell manuals on shotshell loading also, and reloaders should have at least one of these.

There is no reason why today's shotgun shooter can't turn out his own loads. The mystery of putting the components together has finally been eliminated, and shotshell presses manufactured by many companies today will produce high quality dependable loads. Several hours of practice is sufficient time for the beginner to learn how to operate the press, and the manual will prescribe the proper components. With very little labor on the part of the operator, the loading press will keep the loading sequence in proper order and assure perfect crimps.

As the reloaded shells begin to cover the loading bench, the new operator will get caught in the fever of

home loading, and it's unlikely he'll ever again use much store bought ammo.

There's something special in breaking elays, testing patterns, or dropping high flying mallards when the shooter uses his own loads, simply because he is contributing more than just pulling the trigger. I've used handloads for years, and I have never felt that my homemade stuff was inferior to factory ammo. I use the same care and caution in loading scattergun shells as I do in cooking up a batch of varmint loads. The only real difference is that I follow the manual and use a press that requires me to do little else but pull the handle and fill the boxes. Today's shotshell press is a real piece of art. . . .

#### **Shotshell Press Manufacturers**

Aeme Industries, 625 W. Lawrence Street, Appleton, Wis. 54911.

Bair Machine Co., 4555 N. 48th Street, Lincoln, Neb. 68504.

Herter's Inc., Waseca, Minn. 56093.

Hollywood Reloading, Inc., 6116 Hollywood Boulevard, Hollywood, Calif. 90028.

Laehmiller Eng. Co., 6445 San Fernando Road, Glendale, Calif. 91201.

Ljutie Industries, 918 N. 5th Avenue, Yakima, Wash. 98902.

Lyman Gun Sight Corp., Middlefield, Conn. 06455.

Mayville Eng. Co. (MEC), Box 267, Mayville, Wis. 53050.

Pacific Gun Sight Co., Box 4495, Lincoln, Neb. 68504.

Ponsness-Warren, Inc., Box 186, Rathdrum, Idaho 83858.

Redding-Hunter Co., 114 Starr Road, Cortland, N. Y. 13045.

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#### **Ready for Takeoff**

Young night herons, having completed an apprenticeship in the nest, use their feet, necks and wings to climb to the top of the tree or shrub where they remain until ready to fly.



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# IT'S THE LAW



Not all game law violations are intentional. As a service to Commonwealth sportsmen, the Division of Law Enforcement takes this means to briefly clarify some of the most frequently misunderstood or least known game laws.



## Question:

Must my 14-year-old son attend a hunter safety course in order to purchase a hunting license to hunt with me?

## Answer:

Yes, all persons under 16 years of age are required to successfully complete such a training course unless they have held a hunting license in Pennsylvania or another state in a previous year.

## Question:

To whom must a hunter identify himself by producing his hunting license?

## Answer:

It must be shown upon the demand of any person having the authority to enforce the game law or to the person, or his representative, on whose land you are hunting.





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# PENNSYLVANIA GAME NEWS

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COVER PAINTING BY TAYLOR OUGHTON

It has often been said—and it's doubtless true—that the woodchuck, or groundhog if you prefer, has done more to influence precision marksmanship and ballistic experimentation than any other animal. This marmot rarely reaches a weight of 15 pounds, yet his abundance in many areas, plus his wariness, has made him the prime target of long-range riflemen for generations, and he is the reason many super-accurate high-velocity smallbore cartridges were developed. If asked, many landowners will permit careful sportsmen to hunt this species, as chucks are often a nuisance, and this can make summertime the best season of the year for the real rifleman.

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## **SAME OLD BLAME . . .**

**O**N MAY 15, 1972, two days ago as this is written, Alabama Governor George Wallace was seriously wounded by a would-be assassin who shot the Presidential candidate several times following a speech in Maryland. A few hours later a commentator on nationwide television made the first public attack on private gun ownership to grow out of this tragedy, an impassioned, almost neurotic statement that implied this would not have happened had the "gun lobby" and the Maryland sportsmen who opposed the reelection of Senator Tydings, an anti-gun politician, not had their way. There will be many more such attacks, on television and radio and in newspapers and magazines, before these words appear. And they won't make any more sense now than similar statements did following the shootings of John and Robert Kennedy and Martin Luther King.

Most anti-gun hysteria is based on illogical reasoning. These persons assume that the gun itself is the problem. It isn't. It can't be. A gun, be it a handgun, rifle, shotgun or any other type, is simply an inanimate object. It has no will of its own, no loves or hates, no desires, no feelings. All it is, is a simple machine or tool. A loaded and cocked handgun can be placed on a table and it will lie there forever without harming anyone—unless some outside force, a person, activates it. Then it can kill. However, it then is acting only as an extension of the killer's will, and the killer is a human. To blame the gun for the act is asinine. If we blame the gun, we then should logically accuse it of the crime and bring it to trial, as some primitive tribes do spears, etc., an act similar to the way a baby sometimes tries to take vengeance on the hand which has swatted his bottom.

The fallacy here is confusing means with causes. Obviously, a gun can be used to commit a crime, but the cause is a warped human brain. To those who like simple solutions, eliminating guns apparently would eliminate crime. They ignore the fact that murders have been committed since the beginning of mankind—Cain certainly didn't use a gun on Abel—and that historically more people have been murdered with other instruments than with guns. To eliminate them—even the handguns which statistics show are used more often than long guns, or even only the "Saturday night Specials"—is merely an attempt to avoid facing the real problem. The truth is, in a population of over 200 million, there are bound to be a few thousand mentally short-circuited individuals who will make every effort to carry out such an act as the shooting of Governor Wallace. I don't profess to know how to keep these people from acting, so long as a political candidate announces in advance where and when he will appear in person and then mingles freely with the crowd. But I do know that taking away the guns of law-abiding citizens will not prevent a single assassination attempt, for they don't commit such crimes. And it simply isn't possible to collect existing guns from criminals, for they won't turn them in. Perhaps a significant punishment for the illegal use of guns would be a step in the right direction . . . but that would probably hurt the feelings of the criminal-coddlers.—*Bob Bell*



N. Rosato



# Hiking for 'Hogs

By Larry Quigley

TED PROPPED a boot on the porch rail and scowled, as if the looks of the green meadow dropping down to the creek offended him somehow. "The thing is," he said, "we just don't hunt enough anymore. All we do is shoot."

"What do you mean?"

"Well, at first we drove the back country roads and glassed the fields for 'chucks. We used 22s or our big game rifles. But then we wanted to see who could make the longest shot, and eventually we got rifles using higher and higher velocity cartridges. And then we started getting heavier outfits, because they were more accurate. We ended up with rigs that were more suitable to benchrest shooting than hunting — like that thing there." He pointed at a rifle I'd stood in the corner, in case a 'chuck should appear down by the creek. "Nothing but a shooting machine. I know it's accurate, but how far would you want to carry it?"

I glanced at the rifle. For years it's been a favorite varmint outfit—a set-trigger Mauser action with a heavy Douglas barrel chambered for the 243 cartridge, fitted with a high-combed stock and wearing a Unertl 18X scope. With it, I've taken some 'chucks to over 500 yards, many at 350. It weighs 14 pounds.

"I don't carry it far at all," I said. "Just into the Scout and then 25 yards off the road when I want to shoot."

"That's exactly what I mean. Just like all the rest of us. And that's what I'm tired of."

"What do you suggest?"

"I think we should forget the Scout and hike in after them. We know all the landowners around here, they all let us hunt, and I'd bet they'd be glad if we got into some back country and

eliminated a few 'chucks for them."

I mulled over the idea. The more I thought about it, the better it seemed. "We should make an overnight trip. Take sleeping bags, the guns—"

"Not that one," Ted grinned, pointing at my 243.

"Nope, I'll take the little 222. How about you?"

"My old 22-250 will do. It doesn't weigh too much and it's in the car now."

"When shall we go?"

"Why not now? The weather's supposed to be clear for a few days."

## Stew and Spaghetti

A few minutes' discussion settled our needs. Except for a change of socks we'd take no extra clothes. Food would be simple—a can of stew or spaghetti each per meal, plus some cheese and crackers and candy bars. We could heat the food in the cans and eat from them. A small jar of instant coffee, a pan to boil water in, tin cups and a fork and spoon each completed the culinary department. We each had a pocketknife and canteen. Ted would carry a pair of binoculars, I'd take a small hatchet. Even with a light sleeping bag and 40 cartridges each, our loads weren't bad.

We wouldn't need that much ammo. Ted knew it, I knew it and Ted's dad, who was watching us get ready, knew it. But some inner voice, possibly harking back to the old Army days of serious shooting, always says: Take more cartridges; you *might* need 'em. So we did. We always do.

When we had our equipment assembled, Ted asked, "Shall we start from here?"

"Might as well. We can cross the creek and go up that old road through



**BEFORE THE 'CHUCK KNEW WHAT** we were, I had the 222 Sako bedded down in the softness of the sleeping bag and the crosswires centered.

the middle hollow a ways. Then cut north across country before we get to the hard top road. I dunno if we'll see any 'chucks in there, but we ought to spot a crow."

We swung into the packs, shrugged them down and picked up our rifles. Ted's 22-250 was a sporting weight job built on a M98 Mauser action with Weaver K-10 scope. My 222 carried a Redfield 2-7X variable.

"How long will you be gone?" Ted's father asked.

"Tomorrow afternoon sometime, I guess. Tell you what. We'll find a phone and give you a call and you can come get us, okay? That way we won't have to walk in a circle."

"All right." He laughed. "You won't be more than a mile or so away anyhow."

Neither of us answered this. He might be right! I said, "Well, come on, buddy, this was your idea so make like a frontiersman."

We scuffed through the clover toward the old bridge, clumped across it and turned up a narrow dirt road rarely traveled by anyone. A small creek fed down at our right. It was almost dry now but had some nice pools. An old walnut tree hung above us on the bank and perhaps a quarter of a mile ahead the road went into

the woods and curved out of sight.

We leaned into the packs, moving easily against the shallow incline and not talking much. At times, especially after a long stretch at work in the city—it's a treat just to feel honest dirt beneath your boots, a film of moisture on your forehead that comes from physical exertion rather than humidity, the stiffness of a rifle slung across your shoulder.

After awhile, Ted stopped and nodded to our left. "We'd better climb the bank here and work above those scrub pines. No use going too close to the road on top."

We hadn't gone a hundred yards, following a strip of grass above the pines, when we heard a crow calling somewhere ahead. He sounded like a young one. After a moment the sound came again and we placed it in some oaks that formed part of a fencerow. Ted slowly unslung his rifle, slid a cartridge into the chamber and quietly closed the bolt. Keeping a clump of sumac between us and the oaks, we eased forward as long as the cover lasted and then knelt to study the fencerow. The binoculars would have helped but Ted didn't want to risk the movement needed to uncase them.

Suddenly the crow called again and Ted pinpointed him. "In the second



oak, on the far side," he whispered. As I found the crow, Ted sidled over to an old log, sprawled down and rested his arm along it. A hillside made a good backstop for his shot—something that always has to be considered when shooting.

For several seconds it was quiet, only the hum of insects registering. Then the crack of the 22-250 split the stillness. I saw the crow drop.

"You got it," I said.

Ted was using the 50-gr. Sierra spitzer bullet ahead of 36 grs. of 4895 for a velocity of maybe 3600 foot seconds. In my 222 the same bullet gets 3200 from 21 grs. of 4198. Both give tack-driving accuracy, but the bigger case adds about 50 yards of effective range on crows, 100 on 'chucks. This shot had been at about 175, within the 222's range but Ted shot because he was in a better position for it.

Ted pocketed the empty for reloading and we moved out across a field hip-high in weeds, followed a fencerow for several hundred yards and then stopped in a little glen to glass a meadow. It was pleasant to sit in the shade, slumping comfortably against the packs and taking turns with the binoculars. We hadn't been there five minutes when Ted said, "I see one."

I'd been gazing drowsily up through the interlaced branches, thinking of nothing in particular, just enjoying being there. His words brought me back and I slid out of the pack straps and sat erect. "Where?"

"Just below that point of trees at the corner."

Now I saw the 'chuck. Just a tiny spot against the dull green field. "You found him; go ahead and shoot."

"No, it's just right for the 222. A scant 200. Take him." Still watching through the glasses, Ted said, "He's eating like mad."

I swung my pack around front and the movement jerked the 'chuck erect. But before he knew what we were, I had the Sako bedded down in the soft-

ness of the sleeping bag and the crosswires centered. A spiteful crack and the target disappeared as if the earth had opened.

By noon we had taken three more 'chucks, two of them falling to Ted. He'd taken both from one stand at a strong 300 yards, bedded down on his pack for a rest.

"That's a real arrangement," he said. "Almost as solid as a bench."

"Too good, the way you're laying them in. Don't you feel a little guilty?"

He grinned. "You used it first."

### Sprawled in Shade

After lunch we sprawled for an hour in the shade of a big old maple overlooking a gentle-sided valley. Off to the right, on the horizon, a farmhouse and red outbuildings bulked against the sky, but they were over a half mile away. No one else was in sight.

"This is the farthest I've been from crowds of people in months," I said. "It's wonderful."

"Yeah. People are fine, a few at a time, but too many can drive you crazy."

"No 'chucks moving this time of day."

"Not many. I hear a crow, though."

The sound, its raw edges rubbed off by distance, came from a patch of woods a quarter mile west. It would be hard to get within range of that one. No way to approach the woods except across the open fields, and he'd spot us the minute we started.

I stretched till my muscles cracked, reached for the pack and said, "Let's go shoot another 'hog."

"Hog?"

"Sure. This is an old-fashioned hunt—hiking after them—so we might as well be consistent and use an old-fashioned word. All the old-timers call 'em groundhogs. Might not be fancy, but it fits."

"Guess it does. Come to think of it, I never heard February 2nd called Woodchuck Day, either."

The packs felt heavier now than in

the morning, and we'd stiffened a bit from sitting so long, but this soon worked out. As expected, no 'hogs were seen for several hours—except a glimpse of one several hundred yards away running for its hole. They usually den up at midday, preferring to feed early and late. Two stalks we made for solitary crows also failed when they spotted us before we could sort them out of the foliage.

"Crow shooting's better in winter," Ted said. "Easier to see and they sit longer."

Just the same we got another when we eased over a sugarloaf ridge and spotted him on the tiptop branch of a small snag in the ravine below. He was facing away from the gun and I held right on and squeezed. He fell.

We made camp early, in order to have plenty of time to eat and relax before the late afternoon hunting. It was a simple matter of finding a level

spot among some pines where the mat of needles made a springy mattress for the sleeping bags and collecting firewood.

Half-warmed spaghetti from cans, followed by slabs of sharp cheese between crisp crackers, made our meal. Nursing his second cup of coffee, Ted said, "We should've brought some aluminum foil. Could have roasted a couple of those young 'chucks—'hogs, I mean. They'd have made a good evening snack."

"Next time we'll do it. Maybe go all the way, leave the canned stuff at home and depend on what we shoot for food."

"All right. So long as we bring the coffee."

We burned and flattened the empty cans, then buried them, reached for our rifles and headed up along a rolling wooded ridge. "Feel like I'm flying, without that pack," Ted said.

We sat down in a clump of silver birch overlooking a meadow and began to glass. After awhile he handed the binoculars to me. "Wish I had a dollar for every hour I've spent looking through them," he said. "I'd go on safari to Africa. Take you along as gun bearer."

"Thanks." I trained the glasses on a shadow under a flat outcropping of rock. It was a den hole. A moment later I saw a bit of movement, then half of an egg-shaped head lifted into view and scanned the surroundings. Slowly the little critter cased out, wary but not alarmed. "Spooky one down yonder."

"You saw him."

"No, I'd rather watch. It's about 250. With the downhill angle you can hold right on."

I heard Ted work into position behind a downed birch, sensed the movement as he aligned the rifle. Then it cracked and the 'hog collapsed.

"You're batting a thousand on them today," I said. "Too bad you missed that one crow." Ted had tried a shot



**THE FIRE DIED** and we crawled into our sleeping bags. The mild bite of wood-smoke and pine filled my nostrils, relaxed me. . . .



at a feeding crow at well over 400 yards and come within inches of making it.

"Better not to get 'em all. That would take all the interest out of it."

We got two more 'hogs before quitting, without moving from our stand. The 222 took both at about 180 yards. I then proceeded to cleanly miss the last shot of the day, overshooting a small one as it fed less than 150 yards distant.

"What a way to wind it up," Ted kidded. "I let you have it because it was so close I'd have been ashamed to shoot, then you miss."

A short time later we were sprawled on the sleeping bags, watching our fire throw crazy shadows in the pines above.

"One thing you gotta say about this, it's not as uncomfortable as deer hunting," I said. "Last December it was zero, with 10 inches of snow on the ground."

"We had the tent, though."

"Yeah, but the heat was outside."

### **Luxurious Softness**

When the fire died, we crawled into the bags. I wiggled a depression into the needles for my hips and luxuriated in the softness enfolding me. The mild bite of woodsmoke and pine filled my nostrils, relaxed me. I thought of some of the places I'd slept out — from Maine's pine woods to Louisiana's bayou country and from Arizona deserts to above timberline in Montana's Rockies. At the moment I wouldn't have traded this secluded Pennsylvania nook with any of them.

Daylight filtering through the trees awakened me. It was quiet. Not even the sound of insects yet, not a breath of wind. Only ashes and a few blackened pieces of wood remained of last night's fire. Ted still slept.

I threw back the sleeping bag and sat up stiffly. It was cool but would warm as the sun rose. I pulled on Levis and the shirt I'd used for a pillow, then my boots. Ted heard the

stirring and turned his back. A twit-tering came to me and a chickadee flew past. I started to make a fire.

"Wha' time is it?" Ted muttered.

"Daylight in the swamps."

"I just got asleep."

"Yeah." I'd heard his snores even before I corked out, minutes after crawling into the sack.

Muffled: "What's for breakfast?"

"Cold cuts and lemonade."

Only a groan at that. Ted forced himself up. "Where's the coffee?"

I poured us each a cup and we swallowed deeply. "That's more like it," he said. "Any flapjacks?"

"How about a can of beans? Cold."

He grimaced. "Somehow they don't sound so good this time of day."

I had to agree.

Slowly, we got moving. There was no rush. We were out to enjoy ourselves, not indulge in a cross-country race. With the bags rolled and tied, the fire extinguished and buried, we slid into pack straps, slung our rifles and left, munching on candy bars. Behind, only a few dead ashes remained to mark our stay; soon there would be nothing. After awhile I realized I hadn't looked back and a bit of pondering reminded me I never looked back when leaving a camp. I wondered if a psychiatrist might make something of this; I couldn't.

By mid-afternoon we had covered eight miles or so and taken several groundhogs, three of them from a field that contained at least a dozen holes. As we were hoisting our packs to leave, another one appeared outside its hole. "Do you wanta take him?" Ted asked.

"We'll have another chance next time."

"Okay." We slung our rifles and I followed him toward the distant road and a service station phone to call his father. "This is the way to hunt 'chucks," he said. Get plenty of shooting and—"

"Hogs," I said. "We call 'em 'hogs now."

# Winter Deer Mortality

By Bill Drake

PGC Wildlife Biologist



PGC Photo by Keith Hinman

**DOGS—MANY OF THEM** pets which are allowed to roam freely—are the only important predator acting on Pennsylvania's whitetails. Here is a typical result.

**E**ARLY SPRING is the time when most plants and animals are coming to life after a long dormant period.

However, it is also a time of death for the white-tailed deer. Many trout fishermen in Pennsylvania's northern counties have found dead deer along their favorite trout streams during the early part of the season. To the sportsman, it must be disturbing to come across a dead deer in an otherwise beautiful spring setting. He realizes that these deer must have suffered considerable hardship prior to death. The varying degrees of decay of the carcasses found will impress upon him the obvious waste involved. If he is a deer hunter, he may reflect upon how the loss of this and other deer like it may affect his hunting opportunity in

the fall. To the scavengers, such as carrion beetles, buzzards, and even an occasional bear just out of hibernation, these dead deer are beneficial and perhaps a few are even desirable. Excessive losses, however, can only be considered waste of a valuable resource to the sportsman.

## What Is Winter Mortality?

Deer losses can be grouped into the following categories:

1. Hunting
2. Crippling
3. Malnutrition
4. Disease
5. Predation (primarily by dogs in Pennsylvania)
6. Road kills
7. Illegal kills
8. Crop damage kills
9. Accidental and miscellaneous

Hunting season mortality isn't considered a part of winter mortality. The remaining types of mortality do occur during the winter and, as such, are included in winter deer mortality. However, mortality in categories 2, 6, 7, 8, and 9 are only remotely related to winter conditions, if at all. When winter losses are small, these categories are generally the most prevalent causes of death.

Malnutrition, disease, and predation are the categories most influenced by physical condition of the deer. It is these categories of winter mortality which most concern us. When excessive winter losses occur, these factors are responsible for the majority of them. The deer in these categories are also the most likely to be conserved by proper deer management.



## Some Characteristics of Winter Mortality

Observations in this and other northern states have provided general information regarding winter mortality. Most (about 70 percent) of the deer lost to malnutrition, disease, and predation during the winter are fawns. The degree of mortality and time when it occurs will vary with the weather patterns during the winter. Winter mortality from physically related causes can begin just after the deer season and continue until well after the snow has completely melted in the spring. However, most losses usually occur during March and the first part of April.

Dead deer are often found in sheltered bottoms and near streams but are by no means confined to these areas. Surprisingly, high numbers of dead deer are sometimes found around seemingly excellent sources of food such as logging operations and supplemental winter feeders. In general, dead deer are most often found where they have spent most of their time during the winter.

### The PGC's Winter Mortality Survey

In the past, reports of winter deer losses have come from fishermen and other individuals who have made observations while afield during the winter and early spring. The severity of our winter loss is difficult to determine from these reports because of the variable circumstances under which these observations are made. The Pennsylvania Game Commission is conducting a winter deer mortality survey to obtain continuing yearly information on winter losses as they occur in this state. Procedures are standardized so that one year's information can be compared with others. Each District Game Protector, in areas of the state where winter mortality generally occurs, was asked to select three locations in his district where there are generally large numbers of deer during the winter. These areas are rechecked each spring. The number of



**GAME COMMISSION** officer prepares to take bone samples from winter-killed deer. Color and condition of marrow provide important information for biologists.

dead deer found during the search is noted. The sex, age, and cause of death is also determined if possible. These determinations are difficult in some cases because of deterioration of the carcass.

As many hunters know, finding deer isn't easy. This is especially true when looking for dead deer in the spring when there is no movement to help the searcher. It takes an alert eye and the proper conditions. Optimum conditions for finding dead deer occur after snow has melted completely and before the vegetation begins leafing out. Quite often, this period occurs about the first of trout season in Pennsylvania's northern counties.

### Results of the 1971 Survey

Since the spring of 1971 was the first time winter mortality data was gathered in this manner, we can't predict as reliably as we will in future years how moderate or severe our

## Number and Cause of Death of Dead Deer Found

Areas Searched	Dead Deer Found	Causes of Death			
		Malnutrition or Disease	Predation	Other	Unknown
292	354	164	31	36	123

## Sex and Age of Dead Deer Found

Adult Buck	Adult Doe	Adult Unknown Sex	Unknown Sex & Age	Fawn Buck	Fawn Doe	Fawn Unknown Sex
22	53	20	44	93	81	41

losses were. Nevertheless, information obtained is of general interest and is shown in the table above.

An average of 1.21 dead deer was found per area searched. About 84 percent of the loss from known causes was due to malnutrition, disease, or predation. About 69 percent of the deer whose ages could be determined were fawns. There were even larger percentages of fawns in the malnutrition, disease, and predation categories. Approximately 46 percent of the deer whose sex could be determined were bucks. Nearly all of these deer would have been legal bucks the following hunting season had they survived. Many of the 64 percent of does which were lost were carrying fawns. These additions to the herd were lost along with their mothers.

When the number of dead deer found each spring is totaled, we should have a pretty reliable picture of trends in our winter deer mortality. After several years' information has been gathered, we should be confident of detecting excessive mortality when it happens and determine those general areas in which it occurred.

### Management Applications of Winter Mortality Information

Winter mortality information is simply one more source of information concerning the physical condition of our deer herd. It doesn't, by itself, tell

us much about actual conditions for deer in an area. When studied with other biological information, however, it will clarify or confirm our knowledge concerning an area.

Three general factors influence the physical condition and, therefore, the winter mortality of deer. These are the severity of the weather, the number of deer in an area, and the food and shelter available. If an imbalance among these factors is indicated by our biological information — and chronic excessive winter losses might be one indication of this imbalance — management steps should be taken to correct this undesirable situation. Since not much can be done about the weather, we have to manage the habitat and population factors.

All Commission income from the sale of antlerless deer licenses, as well as additional revenue, is spent specifically for improvement of winter food and shelter conditions for deer. Even so, we know this habitat improvement approach can only partly alleviate the problem due to the limitations of money and land which the Game Commission can manage.

Controlling the number of deer in an area, which is done through our antlerless deer harvest, is the most effective management tool for reducing excessive winter losses. By properly controlling our population, we can keep it at a level where only lim-





**THERE ARE ALWAYS SOME WINTER LOSSES** of deer, but proper management of the herd prevents excessively large kills.

ited mortality occurs under normal winter conditions. We can't predict the severity of our winters and when unusually severe winters occur, slightly higher mortality rates must be expected. They shouldn't be excessive, however, if "normal winter" population levels are being maintained.

#### **Conclusion**

Some winter deer losses to malnutrition, predation, and disease can't be avoided, especially during a rugged

winter. With proper management, excessively large losses can be prevented even in the most severe winter. Information obtained from the annual winter mortality survey will help us determine when we have an undesirable situation so that corrective measures can be taken. The final result may not necessarily be more deer. However, it can mean a larger portion of the deer present being taken by the hunter and less needlessly wasted during the winter.

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### **Trappers Harvest 3382 Beavers**

Pennsylvania trappers harvested 3382 beavers during the trapping season this year, according to figures compiled by the Game Commission. The 1972 harvest was higher than the 2672 taken last year and the 3317 trapped in 1970.

Although Pennsylvania's prime beaver range is in the northern part of the state, flat-tails were taken in 45 counties this year. Crawford County was the top beaver producer this year after placing second for the two previous years, yielding 416 pelts. Wayne County, the leader for the past two years, slipped to second place this year with 413 beavers. Susquehanna County was third with 270 and Erie was fourth with 193.

An estimated 1800 trappers participated. Of these, 1551 were successful. Records show 480 trappers caught one beaver, 434 took two, 505 trapped three, 32 harvested four, 29 caught five, and 41 took six.

# Starting a Pointing Pup

By Nick Sisley



**ANYONE WHO TAKES** his wife along to the kennel finds that she is the one who will choose the pup—and maybe her instinct is best!

**M**ANY DOG OWNERS go to a professional trainer to have their young dog worked, and in most instances, this is a good idea. But no one can deny the great satisfaction that comes with training a pup yourself. If you have the inclination and time to do so, give it a try. With only a limited set of rules to follow, satisfactory results can be attained.

If you're going to make a house pet of your new pup, fine. Many excellent hunting dogs sleep on the couch and beg tidbits from the table. It is important, however, that you remain his master and require obedience. Let the dog get the upper hand in the house

and it will certainly affect his worth to you in the hunting field.

My friend Ben had been hunting upland birds for about five years, always over other fellows' bird dogs. But last summer he was finally ready for one himself. I can picture his excitement the day he went to the kennel to make the purchase. The knowledgeable kennel owner explained the traits of this pup and that, but Ben had his ears closed. He had immediately fallen in love with the eyes of a liver-headed male pointer.

Several days later, after he came down off cloud nine, Ben stopped by my place, asking, "What now?" We sat down over coffee, and here are most of the points we talked about.

Ben bought his pup at an ideal age—49 days. Scientific studies have determined that taking a pup away from the litter at an early age is best. Seems the longer a litter stays together, the more the dominant pups have their effect on the others. By no means are the pups ruined by staying with the litter longer—it's only that your chances of having a bold one are better if you bring him home early.

When you pick a pup from the litter, pick one for his conformation (general all around looks—he needs the deep chest for wind, a good head for proper placement of his thinking parts, good feet, well developed muscles, etc.). It's tough to pick out all these features in a young puppy; just do your best. Of major importance is the dog's boldness. The latter can't be stressed enough. A bold pup will usually turn into a bold dog.

When you bring the pup home, have a place for him. For dogs as large as most of the pointing breeds, a concrete run is in order. Wire sides and a well insulated dog box round



out the needs. If you're bringing the pup into the house, have a specified place for him to sleep.

Expect a degree of whimpering the first night away from mother and litter. Remember it's a traumatic experience for the pup, the biggest change in life that he'll ever make. Be lavish with love and care, jostle with him, and pet him frequently for those first few days. This is important.

### **Bang the Pans**

It's a good idea to introduce the pup to noise early. Bang the feed pans around and make a commotion when the opportunity presents itself. Once the pup is accustomed to noise, shooting over him or raising your voice when he does something wrong won't make him cringe. Though few people fire a training pistol over a pup at feed time, it virtually guarantees you won't have a gun-shy dog, especially if the pup is an eager eater!

One of the most satisfying experiences any puppy owner will ever have is seeing his upstart on point the first time. This is usually easy. The old bird wing tied to a length of fishing line is the method. Dangle the wing in front of the pup. He'll naturally dive for it. Keep pulling the wing away. With some pups it takes only a matter of seconds till they start stalking the wing, suddenly staunching up into a beautiful point. Others require fooling with the wing for many minutes, perhaps even several sessions of doing so over the course of three or four days. But ultimately most will point the wing if you maintain their interest. Keep in mind that the wing has limited training value. It does, however, show that instinct is there.

Seeing the pup's first retrieve is also a long remembered day for the puppy owner. Don't wait till he's old enough to pick up a boat fender. Start with a bit of a rag stuffed in a sock with a knot on the end. Tie a short check cord on the pup's collar and tease the pup with the sock dummy. When his

appetite to tear it to pieces is whetted, toss it out on the grass a few feet.

He'll pounce on the sock immediately. He may, and remember I say may, immediately pick it up and lift his head high, walking right back to you with it. If he does, offer up a toast to the gods, because most pups will be more inclined to sink their teeth into the sock with gusto and then, once they've mauled it to their satisfaction, try to run away from the master. But, hah! You have the check cord in your hand. Don't pull him in hand over hand. Encourage him in, pulling gently only when he tugs the other way. Once he's in and you have the sock in hand, give the pup a loving like you've never done before. Be gushy! Probably next time he'll be more anxious to come in with it. If not, maybe the next time! At any rate, the key is praise and the check cord. He can never get away, and he'll eventually start correlating the return of the sock with your coddling.

When he has the sock down pat, move to something with more body, perhaps a cylinder of wood about an inch in diameter. When he's old enough to pick up the boat fender (the standard retrieving dummy), use it.



**PICKING A PUP** can be a tough proposition. Look for good conformation and boldness first. Take pup home as soon after weaning as possible.

Most hunting dog men don't want their dog to range out too far from the gun. If you're one of these types, try putting your pup right into the heaviest of cover at about 12 weeks. Don't keep calling him into you. Let him get accustomed to looking you up. He'll want to stay close when he's young, and you should take advantage of that trait. If introduced to the cover at a later age, he may be inclined to run wider.

If you want the dog to make wide casts, run him in open fields. When he is running a fence line, don't call him off until he reaches the end.

Basic commands are important. The one that is easiest to accomplish is not recommended—"sit." If you want a dual-purpose dog to double in a duck boat or blind, it's imperative, of course, to teach sit. But if you will be using your dog exclusively in the uplands, avoid it. Here's why. When you begin to teach a dog that knows sit how to "whoa," he sits every time.



**DON'T WAIT UNTIL** the pup is near maturity before having fun with him. Retrieving can be started with a rag stuffed in an old sock. Check cord is helpful.

Later in life, when the dog busts a bird and starts chasing, you have to sometimes beller "Whoa." You don't want him sitting down. If he points birds, then starts creeping, a gentle whoa on your part can staunch him up till you get there. But if he's a sitter, he may sit!

### Teaching "Whoa"

To teach a pup to whoa I prefer to wait until he is six or more months old. Start by holding him by the collar and the base of the tail, softly saying "Whoa." When he stays, move around in front. If he moves, return him to his original spot. Spend time coaxing, but be a little firm, too. Try to get him to respond to the whoa command with his tail reasonably erect. A high tail has much more eye appeal than one tucked between the dog's legs.

Another way to teach whoa is in conjunction with "heel." Walk the dog along with a leash to teach him to heel. Each time you stop, give the whoa command. Eventually, you'll get to the point where the dog will stop on command while you keep on moving. Heel is important, too. Don't neglect it.

"Here," or whatever command you use to get the dog to come in, can be taught in conjunction with whoa. As you back off from the "whoaed" dog, say "Here" or any word you wish. Naturally, there are many other training instances when you know your dog wants to come to you. That's the time to call him. Again, lavish praise for a job well done.

When the pup starts getting the knack for hunting, run him with a bell on his collar and a check cord. If he's out of sight and the check cord hangs up in the brush, you'll be able to hear his bell tinkle and find him. If the pup is extra bold, don't let him get in the habit of flushing and chasing game. Concentrate on the whoa command, and use it when he does wrong. If the pup isn't bold, you may permit him to flush and chase for awhile, an-



icipating that his hunting enthusiasm will increase in fervor in the near future. The purpose of the check cord is to help you catch the dog that does not respond to your commands.

You must nurture the pointing instinct, but you must balance it with a degree of discipline for breaking point. Here the training can get touchy. The general rule is don't talk to the dog on point. If, after pointing, he moves ahead and knocks the covey or bird, discipline is required. Call "Whoa," return him to the point of the infraction, and dole out the punishment to match the fault and the dog's disposition. With some dogs, a mere tap with your cap is sufficient. Others require a firmer hand. If you call "Whoa" as soon as the dog goes on point, it could well be that there is no bird there, and you'll be encouraging a false point. It has been my experience that the average amateur handles his dog too much before the flush, only to dole out too little discipline after a bust. Finished performance on point can't be rushed. It takes time and patience. For specific problems, see a professional trainer.

### Native Birds Best

Native birds are paramount in developing the hunting instincts and natural ground pattern that your dog will ultimately acquire. Give him these training sessions at every opportunity. But pen-raised birds are beneficial in helping him understand that staying on point is what you are interested in. A quail recall pen has been the saving grace for many knowledgeable amateurs, and they are used by virtually all of the pros. The quail and the pen are not cost prohibitive, and perhaps a dog-owning friend or two will want to go into partnership on such a venture. Remember, the quail keep returning and you can keep reusing them.

It is preferable to set the quail out in the cover in some type of wire cage. Turned loose the birds can become



**WHEN THE PUP DOES** bring back the sock dummy, praise him highly. He'll soon associate his actions with your attitude, and then your training is well under way.

extra hard to find. Those spun to sleep don't usually flush well. You can tie a little streamer on a stick and shove it in the ground near where you plant a bird in a cage, and you'll know exactly where it will be when you come back with your pup. Work him into the bird with the wind in his face, check cord attached to his collar.

Many pups don't start right off with a stylish point, though some do. If yours does not, encourage him, speak softly, and as a last resort, flush the bird to increase his interest. Maybe tomorrow he'll act differently. Use the check cord on those that point to prevent chasing. You might not want to send one sprawling at the end of his rope the first time, but if he persists, it may become necessary.

When you have your pup working quail to some degree, it's time to introduce him to pigeons. These you shoot! Again, the birds should be planted in cover in wire cages. Work the dog in with the check cord, into the wind. An assistant to handle the dog or do the shooting is most helpful. I started my son handling the dogs in such cases when he was 10 years old.



**PUPS TAKEN OUT of the kennel often gain boldness readily. Kennel owners should change their surroundings as much as possible . . . and so should you.**

Flush the bird from the cage and shoot it, but make the pup stay steady. After waiting several seconds, send him in for the retrieve. You'll have already worked with him on retrieving in past weeks.

Ben made good progress with his pup and during last hunting season he had several unforgettable days afield—especially the one where his pup pointed his first grouse, only to have Ben miss an easy shot in the open. Before the season was over, however,

there were pointed birds that Ben bagged. You can't tell Ben that training his own pointing dog pup didn't offer a great deal of personal satisfaction. He wasn't afraid to ask for help from someone with more experience, but he did go out and do a good job on his own. So can you.

In summary, be sure to snap out your commands. Don't be wishy-washy. Never ask your pup to do anything. Tell him! Give the command only once or twice. If he does not obey, don't keep belling endlessly. Get to the dog and discipline him. Remember the check cord. It makes the catching easier.

Never admonish the dog unless he knows what it's for. After any chastisement sit down and have a talk with him. With one arm around the dog and in pleasant tones, talk to him man to man. What you'll have in mind is getting across the thought, "I still love you Rover, golly I do, but for us to get along together you have to succumb to my wishes." It works, honest it does!

Finally, lavish the praise, really pour it on when the dog does something you like. The end result for you can be a satisfying season afield with a young pointing dog you've brought along all on your own.

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## **The "25-Yard Law" and Woodchuck Hunting**

The Pennsylvania Game Commission reminds woodchuck hunters that "road hunting" is prohibited. It is unlawful for any person, after alighting from a motor vehicle being driven on, or stopped on or along a public highway or road open to public travel, to shoot at any wild bird or animal while the person doing the shooting is within 25 yards of the traveled portion of a highway or road open to public travel.

The intent of the law is to curtail the practice of hunting from a motor vehicle. The law is not intended to prohibit a woodchuck hunter legally parked along a highway for the purpose of entering the field for an extended period of time from shooting within the 25-yard zone. To put the subject in its simplest terms, don't start to hunt until after you've parked your vehicle.





THIS IS THE AUGUST, 1942, COVER OF "OUTDOOR LIFE" which impressed the author so much—and countless others also. Artist Gordon Stevenson did a magnificent job of showing this WWII soldier's outdoors background.

## *Fireside Jottings*

### *A Case for the Sportsman's Scrapbook*

By Rev. George L. Harting

**H**UNTING YIELDS returns in three dimensions: the excitement of the day afield, the sharing of gourmet game dishes with friends and family, and lifelong reflection with one's scrapbooks. Much has been written about the first interest, volumes are filled with tasty game recipes, but seldom, if ever, does one find an article detailing the benefits that accrue from a carefully edited sportsman's scrapbook.

Fortunate, indeed, is the man who during a winter evening snowstorm may use some idle time not idly spent reviewing his fireside jottings.

The scrapbook, I suppose, is the product of a certain temperament. If one has a bent for accuracy, a flair for detail and a tinge for the nostalgic, it becomes a natural interest. Many, however, find the discipline turns them off as being too much trouble. In numerous instances, though, when

through the aid of personal records arguments are settled, hunting regulations verified, and the success of the opening day a dozen years ago reviewed, the calloused kind of person is inclined to express regret that he, too, did not keep records.

Scrapbooks come in as many styles as there are people who compile them. My original effort was a homemade three-ring notebook with plywood covers that had designs of game crudely painted on them. Too clumsy and awkward to be practical, this idea was discarded quickly for professionally done cloth-covered books. These better looking binders held my jottings for as many as three years in a single volume. Escalating costs and fewer professional binderies available prompted another innovation by which the material for a year was carefully edited and stapled in a simple manila folder.

Forty years of editing will salvage a very substantial and valuable body of material which can be classified under a variety of headings such as Technical Data, Important Notations, News Items, Art Masterpieces, Nostalgic References, Personal Observations and Opinions, Correspondence, Recipes, and Miscellaneous.

These headings represent the several categories under which my personal resources are filed. One would be hard pressed to defend each category as being mutually exclusive of the other, nor does the order suggest any priority in importance. These are the major emphases that find their way into each volume.

Simple illustrations can be cited to underline the value of each listing:

#### **Technical Data**

More years ago than I care to remember I filed under this heading a sheet of general information relating to shotshells. Interesting tables detailed such comparisons as number of shot per ounce for various shot sizes; choke relationships citing the number

of shot that should fall into a 30-inch circle at 40 yards and, in short, it capsuled just about every type of information a scattergun enthusiast could desire.

Little did I expect that ten years after filing this item I would own a shotshell reloading tool; that I would be enjoying a hobby which furnishes me all the "fodder" I need for the varied activities from jump shooting for dove with 20-gauge loads to waterfowl shooting over decoys using hand-loaded maximum power 12-gauge shells.

But the value of the technical data took on additional meaning when, unexpectedly, a young professional associate urged me to teach him to reload. Many of the traditional half-truths he had inherited about shot size and their effectiveness were set straight by repeated reference to an old scrapbook and its contents filed under the heading "Technical Data."

#### **Important Notations**

A morning on a northeast Pennsylvania pickerel lake ended in what is often referred to as fisherman's luck. In this case that meant an empty stomach and a wet pants seat. The first problem was solved by hot soup at the first diner we encountered and the second discomfort was alleviated when we returned to the travel trailer, our headquarters for the week.

Next morning the hope that springs eternal among fishermen was about to send us on another expedition, but a vague feeling seized hold of me when my old hunting cap was missing; the cap was dispensable but not the license that was pinned on it. Would this mean I was obliged to lay out a full fee for a second license? My first thought was of my scrapbook and a telephone call to my wife sent her to a specific section of my current scrapbook; there I had recorded a duplicate list of all the pertinent data furnished me with my fishing license. Armed with this information any is-



suing agent was able to furnish me with a duplicate permit that was available at a fraction of the original fee.

### **Art Masterpieces**

Once in awhile as one moves through the pages of outdoor literature or enjoys a sportsman's calendar, he finds a painting that suggests real inspiration. To leave it in the magazine would mean certain destruction or, at the least, total loss for lack of indexing.

During World War II an artist with imagination used the painting of a U. S. Army private in combat uniform as a beginning thought. The novelty of the masterpiece, however, was the way in which the artist used a Canadian honker in flight for the warrior's eye; the top of a creel and a sunset shaped his lips, a camper's hat formed for him a nose and the frying pan over a fire put a dimple in the lad's chin. Graphically a spike tent and a hunter glassing the distance formed a shoulder and the front of the soldier's helmet depicted a waterfall and migrating salmon. The novelty of these listed innovations and a dozen similar details of art demanded that the picture be saved. I used it for a first page of my 1941 volume. I refer to this picture often as "The Pathetic Background."

Another item salvaged was an excellent drawing of a bronze gobbler; the work caught my fancy as an excellent pose to submit to the taxidermist as a sample for a head and shoulder mount for the trophy gobbler I hope to bag some day in my hunting future. This item too is kept available by the services of a scrapbook.

### **Personal Observations**

What is the ratio of success when fishing on days during full moon or dark nights? What success does the assistance of a dog contribute as compared to hunting on your own? What is the relationship of open season and bag limits today as compared to a

decade ago? What are the diseases that affect cottontails? What is the season's success tabulation? These answers and a legion of others like them leap at one from the pages of a carefully prepared scrapbook.

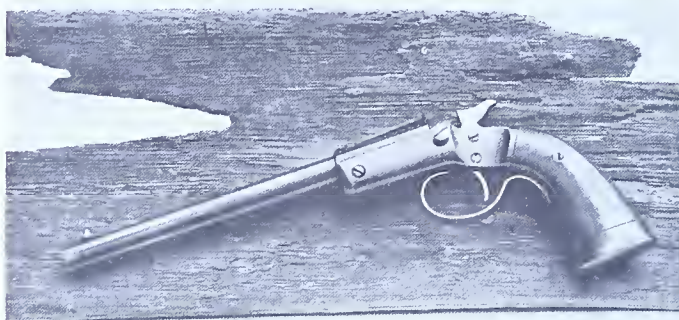
Disciplined editing has a very economical side also. The duck boat occupied an undesirable location for too long, so I enlisted the aid of a friend to grab hold of the leeward side to help me put it into winter storage. Upon turning it into position for moving we discovered a major break in the aluminum and this, I remembered, was a guaranteed boat. A rather general index disclosed that the craft had been purchased in 1963, and upon referring to the proper volume, I had at my fingertips the total batch of information necessary to lay claim to the benefits of the guarantee.

Perhaps, however, the greatest service these pages afford is the relaxing experience one finds by the open fire during a winter blizzard. Here the nostalgic comes to life. Here is the statistic that proves you're right about last season's opener: your partner did miss three cock birds before he bagged one. The next page holds a witty cartoon about the wife admonishing her husband not to come back from the hunt shot, or half shot. Then there is the snapshot of your buddy, his half coconut shell and slate in action as he attempts to lure in for you the spring gobbler. You come upon a page holding a half necktie featuring a beautiful waterfall. With damp eyes you remember Jake gave it to you. Here is a Father's Day card showing a brace of mallards; Beccy gave it to you. She was your little girl then, and still is, but quite changed since you "changed" her last.

These are the fireside jottings that put the emotional trimmings to the volumes that defy dollar and cent values. They furnish a third dimension for the outdoorsman without which any sportsman's experiences remain impoverished.

# *Saga of a Stevens Single-Shot*

By Cyril D. Jensen



**J**UST AN OLD retired single-shot pistol, that's what I am, but I've had a lot of fun in my time. I was born way back in the late '20s—don't know just when but I have dim memories of being taken on trips to the quarry for target practice about 1928. In those early days my owner wasn't so hot, and we wasted lots of lead. I do remember, though, how I came to be owned by him because I overheard the story told on a number of occasions, including three times to his son.

It seems that when my owner was about 17 he picked up a summer job surveying in the north woods in Minnesota. The county surveyor had achieved fame as a deer hunter, not only because of his ability to find deer, but because of his ability to throw the rifle to his shoulder and be on target. In other words he was renowned as a snap-shooter. On the particular day when the wish was born to own me, this lad and the county surveyor were traveling to a location where some surveying was needed. The trip involved a ride of 20-some miles to the end of the road, then a hike of 12 miles.

After the pair had said good-bye to the driver and prepared for the hike,

the surveyor produced one of my ancestors and suggested a little shooting. Specifically, he suggested, to the lad's consternation, that the latter throw his cap up in the air to permit the surveyor to try out his skill. The lad's cap had to do duty for the remainder of the summer, and so, to stall off the impending tragedy, he countered that he would do it if he in turn could have a shot at the surveyor's hat. Now a hat obviously is harmed much more by a lead bullet than is a cap, but the chance of hitting it was minimal, the lad never having fired a handgun before. So the shooting event started.

## **Up It Went**

The surveyor loaded his single-shot and the lad prepared to throw up his cap. He gave a heave and up it went. A shot was heard and to the lad's joy no jump of the cap occurred. Then came the surveyor's turn to throw up his gear. Very elaborately he flattened the top of the hat so it would sail for yards and yards and present a minimum target. And then came the throw. A curious phenomenon occurred. The hat sailed up and out a mighty distance as expected—and then like a boomerang, back it started. The lad excitedly aimed but did not immedi-



ately pull the trigger. Back through the air slid the hat, presenting a steadily enlarging target. The lad squeezed. Simultaneously with the report, came a spasmodic jerk of the hat. He had hit it! Undoubtedly just a lucky shot, but he never forgot that first shot.

Ten years later, having completed a course in civil engineering, he was appointed an instructor at Lehigh University. The salary was insufficient to permit the purchase of a real target pistol, but the desire to own the Stevens single-shot was too strong to be denied. And that's when I was acquired.

Soon we joined a small group of target shooters in a nearby quarry, where my owner improved his shooting ability. This was followed by hunting expeditions—mostly hiking expeditions, actually, as we did not often get within range of game. I do remember one June day when a crow sat still in the mountain woods long enough to let my owner draw and squeeze off an accurate shot. There was a comical sequel to that story. He removed one wing to take home to prove his success and placed it inside his shirt. Ten minutes later he discovered that this particular crow had fleas.

#### **Notch for a Groundhog**

Later a notch was added for a groundhog. Now groundhogs are prone to hole up long before the hunter gets within pistol range. However, one made the mistake of approaching a woodpile at the same time my owner did. They saw each other at 15 yards and the chuck was hit very near one ear. The shot looked so good that my owner accepted the sights as perfect even though he had accidentally dropped me the day before, raising some doubts as to whether or not the front sight had been knocked off center.

The failure to check the sights was to cost wasted lead a few weeks later when we were in Minnesota working



**THE STEVENS Single-Shot pistol provides a wealth of memories for Cyril Jensen, who got his as a young man and still uses it occasionally.**

on the gopher population. A gopher is a mighty small target, and the front sight was off just a mere trifle, but the combination was sufficient to account for five straight misses. A sighting-in session followed and the score improved.

My greatest pleasure was in being taken on our biannual trips to Minnesota to visit relatives. There my owner fondly called me game-getter, and I accounted for numerous gophers, several squirrels and another crow. The crow story bears retelling since it involved stalking a flock of crows and arriving to within 20 yards of a crow feeding on the shore of a lake. All this in spite of a lookout crow perched on the tip of a tall tree. Needless to say, we really stalked those crows. To my owner, as he aimed me, it was as if the crow were the size of the black

of a 20-yard standard target. He gently squeezed the trigger. I was steady and the aim was true. The flock of crows took startled flight. All but one. Moments later my owner and I could hear them a quarter mile away bawling out the lookout in no uncertain terms.

Returning from Minnesota to Pennsylvania to resume teaching duties, my owner again resumed his target shooting. Eventually there arrived the Sunday before deer season. Arriving at the quarry my owner found a half dozen deer hunters there before him, all blazing away at an unfolded newspaper 100 yards distant. With the cannonading going on my owner gave up all thought of a practice session and became just an observer. He became very much aware of the numerous misses. Just think — missing an opened newspaper at 100 yards! In

exasperation, during a pause in the shooting he lifted me up and fired a single shot. Later when the newspaper was examined there was a tiny 22-caliber hole respectably placed, much closer to the center than were most of the deer-rifle slugs.

Years later, my owner's son, having earned his rating of pistol expert while in the armed service, had me along in the same quarry, and at that time he hit a plate-size target at 100 yards, bettering the shooting of a companion armed with a 22 rifle, both firing offhand.

Now I'm just a retired gun. Here you see me lying against an old weather-worn slab, but I really spend most of my time sitting on a pair of pegs on the wall of my owner's study. But I'm not sad. I've had a good long life and now and then I enjoy looking back over the years.

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## *The Beaver-Trout Hole*

By Bob Latimer

**O**N ELK CREEK, not too far below where the Hoagland Branch empties in, there's a hole known as the Trout Hole. It has memories for many of us who fished that creek a lot—and a special one for me. This hole was formed by the creek flowing into the steep side of Bear Mountain, this causing the stream to make a sharp right turn. Floods, ice gougings and the current changing there caused the pool to be dug out quite deeply. A rock as large as an automobile at one time must have broken off a ledge above and landed at the steep edge where the current strikes, and maybe this helped form the pool. At any rate, it has been there many

years and was the home of many a big trout, the big rock providing plenty of cover.

Being a Game Protector in Sullivan County, this was in my bailiwick. One evening early, during the 1930s, I had parked my car at a turn-out place and followed the path over to this hole. It was during the trout season and probably early June. I was prepared to watch this pool till dark, to see if I could see a big trout start to work about dusk. If I did, would go back to the car to get my tackle, rig up and try for him after dark with a string of big wet flies. Found a seat on the gravel bar back from the edge a little and watched the creek. The remains

of a couple campfires were on this bar, probably having been built by fishermen earlier in the season. It was very still, no visible hatch of flies and no trout working on the surface that I could see. It was one of those evenings on a stream that seem ideal—but evidently the trout didn't think so.

Don't remember how long I had sat there, when I saw a man coming up the creek fishing dry flies. As he kept coming closer, could see he was exceptionally good at what he was doing and enjoyed watching him. When he got close enough, I recognized him as the well known Jack Knight. He had not long before returned to Williamsport to live and I had heard him lecture at a sportmen's meeting there on fly fishing. He was an authority on the subject and an outdoor author of renown.

#### **Obstinate Brownies**

He quit fishing when he got to me and came over to sit down. I introduced myself and we talked fishing. He said his son Dick was fishing behind him and as the trout were not working, would wait for him to catch up. Finally Dick appeared and I was introduced to him. The three of us sat there talking about why on some evenings brown trout could act so obstinate.

A movement to our left attracted our attention and it turned out to be a beaver coming downstream over the riffle that led into this pool. The water there was shallow enough that she was half swimming and half crawling. There wasn't anything exceptional about that, *except that on her back was riding a small beaver about the size of a muskrat!*

We sat still and quiet and when she reached the pool itself, she swam down through it and passed us within 20 to 25 feet, out of the pool and down over the riffle below, then out of sight around a turn. Naturally, we then had a lot of "beaver talk" about this sight. Don't think at that time

these men had seen many beaver in the wild. I had, but nothing like this. Sullivan County had a lot of beaver then and I had plenty of damage complaints to service. Had watched them many times at work—but had never seen a baby one riding piggy-back, and never expected to. To be frank about it, don't think I would have ever told about this one, had not witnesses been present and seen it too.

We were still talking of this incident a few minutes later, when to our surprise she reappeared coming back upstream. She had cut a piece of willow about an inch through and maybe six or seven feet long. She had this in her mouth about a foot from the butt end and was towing it along, the little fellow still riding "slick," his legs spread out over her back. This riffle was also shallow enough that she had to crawl. She stopped a couple of times and shook, it seemed a bit playful like, not hard enough to dislodge her rider. Don't know if a beaver can grin or not. Though we were close, it didn't seem that we could see the little fellow's lips curl—but it did look as if he was enjoying it!

When she reached swimming water in the pool, she swam to within several feet of the big rock and dove, willow, little beaver and all! That's the last we saw of her. She evidently had a hole or cave behind the rock. This rock apparently gave shelter to other than the big trout I had in mind.

After sitting there awhile longer, we decided the show was over. Jack and his son decided to work on up the creek and see if they could find any trout that had changed their minds about feeding. I decided not to fish and left for home. Though many years have gone by and a lot of water has flowed through the Trout Hole, I often think of this and feel that the three of us were very fortunate to have met and been sitting there quietly when this occurred. Am convinced that very few people ever witnessed a sight like it.





**ROCK OUTCROPPINGS MAKE FINE**—though dangerous—perches overlooking Pine Creek Gorge, and Bill always seemed to find the narrowest.

# Pennsylvania's Grandest Canyon

By Robert VanDeventer

**"HEY**—there's a waterfall!" It came into view as we worked around the wooded slope. We had heard it long before, and no wonder. It was of a very respectable size—30 feet high and 20 wide.

"Neat!" cried my son, Bill. "No wonder we heard the roar. We can zigzag to it."

We were hiking down Pennsylvania's Grand Canyon, known more soberly as Pine Creek Gorge. It lies near Wellsboro in Tioga County, Leonard Harrison State Park on its eastern rim and Colton Point State Park on its western.

Earlier, I had read a bronze plaque at Harrison Park: "Pine Creek Gorge has been designated a registered natural landmark under the provisions of the Historic Sites Act of 1935. This

site possesses exceptional value illustrating the natural history of the United States. 1968. National Park Service."

Suitably impressed, I had approached "Hazardous Trail" outside the park's snack bar and curio stand, pausing to absorb the view.

By Western standards, it is less a canyon and more a deep ravine, Pine Creek fighting through rapids at its bottom, heavily wooded slopes curving in and out on either side. Rock outcroppings make fine—though dangerous—perches. Bill always seemed to find the narrowest.

In the depths, we could see rafts and canoes in the creek's white water. A railroad flanking its edge reminded us a bit of the Royal Gorge in Colorado. And far across we could see the



**MANY CANOEISTS AND SPORTSMEN** WITH other types of boats float through Pennsylvania's Grand Canyon, especially in the spring when the water is still high.

silvery blur of Bear Run Falls. The gorge is steep. You get the giddy feeling you can jump right to the bottom.

The gorge became state property in 1922. Leonard Harrison, a lumberman, gave the land to the state. The local chamber of commerce publicized the area under the name "Grand Canyon of Pennsylvania." They advertised it as 1000 feet deep and 50 miles long. Ranger Larry Miller told me, however, that the deepest point is 833 feet and its true length roughly 30 miles.

When you're on the trail, the true depth matters little. We worked on down over slippery stones, around and under roots that grew across, beside, and even over the trail. We passed more waterfalls.

A fellow hiker on the trail stopped. "Hi. Do you know the names of the falls?" I asked him.

"No. I thought you might," the hiker said. "I just moved into Wellsboro. Nothing to do, so I drove out. Last summer I went down in the

Arizona Grand Canyon and I wanted to see what this one is like. Have you been to the bottom?"

"We're on our way."

"It took me four and a half hours to hike down in Arizona," he said.

### Even Higher

We continued past another cascading waterfall, even higher than the first, roaring and blowing spray all over the trail and the hikers. Harry Bodine, who lives nearby, told me that the whole canyon area is alive with falling water.

"There's falls higher than these, too," he said. "On Birch Run, the Ladder, Falling Springs, Red Ledge, Four Mile Run and Bear Run." However, as Ranger Miller said, it is tough hiking to get to any one of them, even to Bear Run Falls, which shone brilliantly across the gorge. "You'll get soaked working to them through the woods," he said. "No trail."

Soon we passed the lowest cataract of the falls we had been following. We came out onto the railroad in a



moment, crossed, and picked our way over riverside rocks to Pine Creek itself.

It's about 100 feet wide at this point in spring, and fast. Clear. Rushing. Right across are two summer cottages, accessible only by foot trails from Colton Point Park. It was not always that way, however. The southerly one was owned by Richard Stone, governor of Pennsylvania in the 1890s, who it is said entertained Theodore Roosevelt in this cottage. But they didn't walk down. In deference to the chief executives, the railroad stopped their train and they boated over.

#### **Popular With Canoeists**

The boats we saw would have had trouble with the crossing. Water too fast. Pine Creek is a primary stop on the seasoned canoeist's spring rounds, and the day Bill and I were there, we counted over 50 craft in a morning. Most were inflated rubber boats furnished for groups by a commercial establishment in Ansonia. But the kayaks and aluminum jobs were private rapids shooters, heading down river

on their 15-mile descent to Blackwell. Canoeists will tell you it's a great ride.

We returned to the trail's end and marked the time: 1 p.m. We started up, Bill leading and making numerous side trips to stand upon, astride, and beneath each of the seven major falls we would pass on Little Four Mile Run, as we learned the creek was called.

I noted three five-foot-high falls near the bottom. A series of cascades followed, then more three-to-four-foot falls and then the lowest major one of 20 feet. Five are over 20 feet high and one is over 40.

The yellow blazed trail we followed, called Turkey Path, is all that remains of the mule drag lumbermen once used to direct their logs to the creek, before Harrison donated the land and moved operations to West Virginia. Logs would be piled into great jams held together by a single "spike." When spring flood water came, the spike would be pulled and the whole mass would crash down on its way to the mill at the hamlet of Tiadaghton, eight miles downstream. In the 1930s

**THE DAY THE WRITER AND BILL visited the canyon, they counted over 50 craft of various kinds on Pine Creek in a morning.**



the Civilian Conservation Corps transformed parts of the mule drag into the trail.

We soon left it, in fact, tired of the ladder-like switch backs. Straight up we climbed, crossing the trail several times. It was a 30 percent grade and I was able to climb with my hands, though I was not bending down.

Bill stopped to throw a rock into a waterfall from a slippery ledge. "Try not to fall off," I pleaded.

Part way we followed a crystalline rill that splashed down over red shale. We came up just afterwards to a point on the trail where a log bench looked inviting. "I wonder if that means half-way," Bill said.

We saw a towhee and several bluejays there. The night before we had seen two beautiful deer at the roadside. I later asked Harry Bodine if there were any bear.

"You bet your boots," he said. "I had one right alongside my car not long ago. And we stumbled across three of them over by Charlie's place last winter. Mother and two cubs sleeping. We didn't try to wake 'em," he said with a laugh.

#### **Mountain People**

Bodine represents the old-time mountain people of Tioga County. His father has run the park's concession stand for over 25 years. His wife, Janet, is from Wellsboro. Her father was camp cook in the CCC days. Young Bodine said that newcomers are of two types: people from the cities who buy farmland that the owners can no longer profitably work and turn the land and buildings into hunting lodges and summer cottages; and the Mennonites (a dozen families in the last five years) who apply new methods to farming the steep, rocky land.



**HIKING INTO THE** canyon, which has a depth of 833 feet, many good-size waterfalls are passed. These always interest youngsters.

The others who come are tourists. "The second week in October," Ranger Larry Miller said, "everybody comes for the foliage. The parking lots are full. Most other times, except holiday weekends, you can get a campsite without too much strain."

A pretty blonde who was helping in the concession stand confirmed this. "Last summer, it was pretty well crowded most weekends, especially Memorial Day and during the Laurel Festival."

Bill and I found the park sparsely used. I picked up a plastic rainhat some woman had dropped near the bench, carried it up, and tied it on a railing near the plaque. I was breathing well, but not puffing (Bill was not even breathing hard), as I looked at my watch. It was 1:21 p.m.

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#### **All Sizes**

The giant Canada goose, largest of the species, weighs up to 20 pounds, while the smallest, the cackling Canada, weighs only about four pounds at most.



# No One Loves a Porcupine!

By Carsten Ahrens

I'VE NEVER HAD the slightest affection for a porcupine. How I've suffered from his big, overactive, stained incisor teeth! He has cut to shreds my shoes, socks, pants, and gloves. He has reduced to something like sawdust anything I've handled that was made of wood. Late one afternoon, three of us took turns working to repair a tire and mount it again on my old bus. Probably it was smeared with sweat from six hands. During the night, a porky chewed away at that casing and a blowout resulted. I've always hoped the bang of the escaping air scared that particular rodent to death, or at least chased him into the next county, but I know better. The pine pig is so dim-witted a blowout of the biggest tire wouldn't faze him.

Scientists, of course, come to the beast's rescue. They insist the animal is so everlastingly salt hungry that he can't help but be the way he is. He is simply addicted to that vague varnish of NaCl solution left behind by a human when he handles anything, they say. But I'll never believe it. The porcupine is just an excessively stupid animal, just a naturally ornery bundle of the first water.

## In the Sierra Nevadas

Years ago in California I rented, sight unseen, a hunting lodge. One night, dark, cold, and late, when my companion and I finally stumbled into it, we discovered that all the porcupines of the area had been using the shelter as a rendezvous. They had chewed a hole through the door, then had gone on chewing away at almost everything in the place. Mattresses and pillows were now like nothing I

had ever slept on. The porkies had really ransacked what had been a nicely equipped lodge. Fortunately, for them, the criminals had left the scene of the crime.

I was brought up on the argument that you never destroyed a porcupine unless you were lost in the woods and were starving to death. A porcupine, so ran the supposition, was the only animal that a lost and unlucky angler or a gunless hunter could slay. The starving one could do in the spiny one with a club. Therefore: don't wantonly deprive a porcupine of life and any porcupine's death was wanton unless you were starving. All porcupines had to be carefully conserved to sustain life in lost, starving, gunless humans. You were lower than dirt if you disposed of a porcupine merely because he kept reducing your ax handles to sawdust. Oddly enough, in all my years in wilderness areas, I've yet to meet someone who owes his life to the sustaining nourishment of a roasted porcupine.

## North of Valdez

Once I was driving along the Richardson Highway in Alaska. I was collecting water insects, and I took a side "road" hardly wider than the car to reach an off-highway lake. Dwarf willow and aspen crowded in; there wasn't a pine tree in sight. I had gone about half a mile when suddenly on rounding a bend, three of those pine pigs sauntered ahead of me in single file. Their appearance on this vast flood plain surprised me, for I didn't know then that porcupines will eat the inner bark of many trees other than the conifers. And I had never encountered more than one at a time;



*Photo by Leonard Lee Rue, III*

**FEW PERSONS FEEL** that porcupines are handsome, and their habits don't make friends for them. Nevertheless, they are an integral part of our outdoors.

I regarded them as solitary beasts.

Naturally, I had to slow the car to a saunter too. I blew the horn repeatedly, but they pretended not to hear it; probably they didn't. I stopped the car, threw gravel at them, even got a stick and attempted to push them out of the way. But as I was struggling with one, the other two would gather round, chattering constantly, and peering dimly up at me. I was tempted to drive over them but I didn't know what their spines might do to tires; besides, that might finish off a beast, and anyone with an ounce of righteousness just doesn't do that to a porcupine. I thought I'd have to reverse all the way to the highway. Fortunately, when I had backed to the curve, the porkies suddenly decided to disappear into the aspens, and glory be, they did.

A porcupine isn't something easily pushed around. The members of that trio would have weighed 25 pounds apiece. When I attacked all three, they turned toward me, reversing their hair and quills in an up-and-forward posi-

tion in what seemed an effort to shield their heads. Their bodies were blackish with lighter hair and quills which became black toward the wickedly-barbed ends.

One of their many oddities is their low rate of reproduction. A French-Canadian guide once seriously explained this as we paddled along. In the beginning when the good Lord-God was creating the animals, He slipped out of His shoes and took a well-deserved nap in the midst of His labors. While He was asleep, the newly-fashioned porcupine chewed up the linings of His golden slippers. Upon awakening, the Creator saw the shambles of His footwear and penalized the rodent by permitting it to have but a single offspring a year . . . which is most unrodentlike, but surely a blessing for all the neighbors.

#### **On the U. S.-Canadian Border**

Once three of us roughed our way across this wonderful country and were enjoying that most unspoiled of national parks, Glacier. We had spent the last night of our stay at a campground, and not knowing when I'd have a chance for another bath, I got up early and went for a shower. The tiny cubicle was just big enough to hold the heater and a bather. Someone, the night before, had forgotten to close the door, and a porcupine had plodded in. Porky had settled down with his anterior under the corner heater and his tiny posterior out where the showerer would normally stand. It was early, and Montana mornings are cold. I was inadequately clad . . . just a medium-sized bath towel . . . for I expected to be the first and only occupant.

Through the open door I leaped . . . and hastily jumped out again, my feet just missing porky's tail that he swung with pendulum regularity back and forth across the floor. But no argument appealed to him. He was warm and comfortable and he meant to stay. He was there first. I found a fire hoe and rake and finally loosened him and got



him out. But getting him out of the shower wasn't enough. In the scrimmage he had succeeded in littering the floor with dozens of quills of varying lengths, each armed with a sharp hook. I had to find a broom and clean up the quills before I could enjoy the solitude of the shower.

### His Halcyon Days O'er

Then there was that time in Potter County . . . but why go on! You get the idea and see how frustrated I had become. They were always picking on me and I couldn't retaliate.

But now it may be going to be different; porky's long immunity may be about over. On recent trips West, in forests especially given over to the growing of ponderosa pine, I found increasing annoyance among woodsmen with this rodent.

It seems that porky is fond of tender buds, twigs, and bark at the very top of the young ponderosas. This is long-standing treatment for growing a multitude of plants. The florist "pinches back" ever so many varieties so they won't grow lank and tall. But it doesn't work well with a pine tree. They call it "stage heading" out there. The superintendent of Deschutes National Forest was quoted as saying that a single porcupine might damage or liquidate scores of pines in a year. The foresters would have to eliminate

the rodents or the rodents would eliminate the forests. To my amazement, I wasn't pleased, for with everyone turning against porky, I was moving toward his cheering section. I still can't explain my reaction to the attacks on my longtime, toothy foe, but in spite of his mischief-making, I'm for him . . . the scoundrel!

Back in the unenlightened '30s, when I was a ranger, we used to feed the bears nightly in Yosemite.\* Under bright lights the animals would enjoy the leftovers from the park hotels. Directly across the river, in the safe dark, visitors would watch and comment on the table manners of the big mammals. What was always amusing was the occasional appearance of a porcupine among the bears. The large, cantankerous bruins, often 40 in number, would dispute the presence of each other at the troughs, but when little porky waddled in, an avenue through the bears would open and the barbed one would proceed without incident to the "salad bowl" for anything he thought fit to eat.

So I don't think I'll have to worry about him. He'll get by. Though a porcupine's senses of sight and hearing seem most inadequate, the Lord-God didn't completely forget him.

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\*These free feeds were eliminated 30 years ago; they made bums of the bears.

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## Firearms Accidents Among Lowest

Many believe that firearms mishaps are a major cause of accidental deaths. This is a misapprehension, according to an accident study issued by the Metropolitan Life Insurance Company.

The study revealed that the rate of fatal firearms accidents is among the lowest of all accident rates. In fact, the Metropolitan Life report indicated that firearms cause fewer accidental deaths among men than any other source listed. While the firearms accident rate for men per 100,000 was put at 2.1, fire ran twice as high at 4.4. Drowning was listed at 5.1, falls at 9.5, and motor vehicles once again topped the list at 47.2.

Firearms accidents were not even listed by Metropolitan Life as a cause of accidental death for women, although listings were given for poisoning, falls, fires and drowning.



**YOUNGSTERS IGNORE** danger to picnic on trunk of wind-blown tree, above. Below, beaver-felled hardwoods across sluggish stream will eventually form framework for dams that will flood low-lying area. Below right, woodpecker searches in dead tree for insects.



**BLACK BEARS** sometimes knock down trees and brush. Right

## Timber-Falls

**B**LOW-DOWN, wind-blown, hollow logs, and uprooted trees. All have practical uses. Drifted logs make a bridge. Logs or tree branches are traps for small game. A fallen tree is a source of large branches of a dead tree. All timber-falls have topographs on the face of a tree. All and campers are the real Thoreau wrote: "Once we again and we were listening faintly echoing or creeping aisles, a dull rushing sound as if half-smothered under fungus-like forest, like the tant entry of the damp not been there, no more. Joe in a whisper what is







for winter in piles of blown-grouse drums on his log.



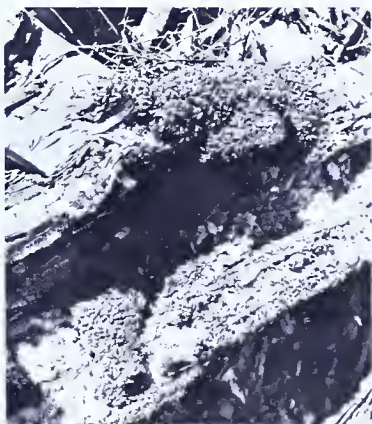
## asure-Trove

c-fall. All drop deadwood, e trees to the forest floor. otated tree makes a crude hibernation for bears and ntain an owl's nest. The me a driftwood treasure- ed value. They write au- ness. Hunters, fishermen, ure does the writing. As [the Indian guide] called moose, we heard, come ar, through the moss-clad n a solid core to it, yet asp of the luxuriant and g of a door in some dis- y wilderness. If we had eard it. When we asked answered, 'Tree fall.'

By J. Almus Russell

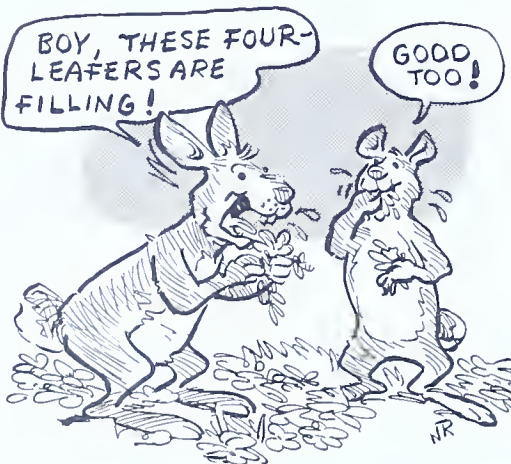


**DRIFTWOOD DEPOSITED** on banks of Susquehanna makes excellent fireplace wood. Lightning splintered top of balsam, below, scattered pieces over wide area. Tree will eventually fall. Fungi, far left, breaks down stump to produce humus. Left, honey bees swarm out of opened hollow log.





# FIELD NOTES



## Good Question

While conducting a tour on State Game Land 223 in Greene County for the East Franklin School, I explained about the clover strips and one of the third graders asked this question: "Is a four leaf clover better rabbit food than the normal three leaf clover?"—Land Manager W. A. McGinness, Claysville.

## Was He Really Human?

**ROSS LEFFLER SCHOOL OF CONSERVATION**—A fellow officer and I observed an unusual tree specimen while motoring along a route not far from the training school. This tree was a species unfamiliar to us. We were able to identify an immature black cherry, but it had unusual fruit. Upon closer observation the fruit turned out to be beer cans. Each branchlet carried one empty beer can. Can you imagine the thinking of the human being that took the time to construct this eyesore?—Trainee B. R. Hambley.

## Something in Return

**MONTOUR COUNTY**—Deputy Ken Greiff related a fine example of hunter-landowner relations as told to him by a cooperator in the Farm-Game Program in upper Northumberland County. The farmer told Ken about a hunter who had contacted him prior to small game season, requesting permission to hunt. Permission was granted and the hunter visited the farm several times during the season, each time stopping by the house to check with the farmer before starting to hunt. This really impressed the farmer. At Christmas time the farmer answered a knock at the door and found this same hunter offering a basket of fruit and nuts and expressing appreciation for the opportunity he'd had to enjoy his sport during the past season. This gesture of sportsmanship will long be remembered by that farmer. I suspect that this hunter is a subscriber to **GAME NEWS** so I would like to say thanks for the "positive action" that will make our job of keeping land open to hunting much easier. Here's hoping others will take the hint and get involved . . . now.—District Game Protector R. W. Donohoe, Danville.

## Young Ones Learning

**CUMBERLAND COUNTY**—It is gratifying to see that many young hunters are wearing fluorescent orange outerwear while groundhog hunting. I wish the adults would follow suit.—District Game Protector E. F. Utech, Carlisle.



## Today's Tip

**WAYNE COUNTY**—After years of tolerating uneven laces when tying high-cut boots, something which I am sure has frustrated hunters, hikers and campers alike, I received a suggestion from my 8-year-old daughter which works. Before lacing the boots, simply tie an overhand knot in the middle of the lace, then thread lace through the shoes, keeping the knot between the first set of opposing eyelets. The knot prevents the lace from moving past the eyelets and presto—even laces!—District Game Protector F. G. Weigelt, Galilee.



## Now You Know

**SCHUYLKILL COUNTY** — During a speech about young wildlife to a group of Cub Scouts and their parents, I mentioned that the young red fox pup I was holding was a female. Without a moment's hesitation, one youngster raised his hand and asked the inevitable question—how can you tell a boy fox from a girl fox? Immediately, another excited youngster raised his hand, exclaiming, "I know, I know." With some apprehension, I called on him to explain. He stood up and in a very confident manner said, "Well, you watch them for awhile, and if it has puppies, it's a girl." — District Game Protector S. L. Opet, Tamaqua.

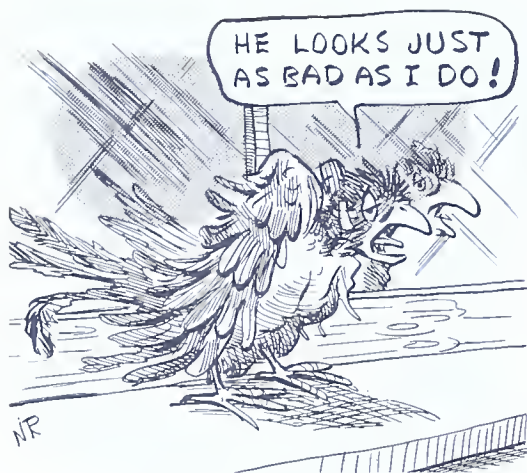


## Problem Solver

**CUMBERLAND COUNTY** — Having the populated district of Cumberland County, I receive many complaints about wild animals causing problems. Recently, wild ducks caused some problems, according to several women. One reported that a mallard hen was nesting in her yard and she didn't want this. Then I received a call from a woman that a pair of mallards had returned to her yard for the past several years to raise their young, but this year they didn't come back and she was quite upset. So soon as the young ducklings are hatched I am going to move them from the yard where they're not wanted to the yard where they are missed. I hope that next spring they land at the right address, so both women are happy and I don't get gray hair so fast.—District Game Protector J. P. Filkosky, Mechanicsburg.

## That's Life

**ALLEGHENY COUNTY** — If we don't get a license increase and have to cut down on services, there is going to be a lot of screaming from the non-license-buying public when I start telling them to get their own skunks out of the window wells. — District Game Protector R. Belding, Baden.



### Determined Robin

**CENTRE COUNTY**—For the past week my daughter Stacey has been awakened by a robin that flies into her bedroom window each morning. A large Norway spruce grows alongside of our house and I believe the robin intends to build a nest near Stacey's window. But he sees his own reflection in the window, thinks it's another robin invading his territory and tries to drive it away. You'd think after a week of banging into the window, he'd have learned what was going on. —District Game Protector G. F. Mock, Coburn.

### Some Make Own Problems

**HUNTINGDON COUNTY**—Each year we ask people not to feed the wildlife or try to "save abandoned animals." Near Spruce Creek a bear had been fed last summer and throughout the fall and now is back again looking for handouts and becoming a general nuisance, tearing clothes off lines, etc. The next step is for the bear to be trapped and moved out of the area. Had the people heeded our words last summer, this situation would not have developed and they could have enjoyed an occasional visit from the bruin. So again we ask—please let Mother Nature take care of her own.—District Game Protector E. W. Gallew, Alexandria.



### Tough Decisions Take Time

**BLAIR COUNTY** — A woman's pleasant voice on the phone claimed she had red squirrels in her attic and would I please tell her how to get rid of them as they were doing damage. I advised her to set a couple of wooden rat traps and bait them with peanut butter. Three days later the phone rang, and the same lady asked if she should use creamy or chunky style.—District Game Protector P. R. Miller, Bellwood.

### A Real Know-It-All

**CARBON COUNTY** — One Saturday, while taking my family on an outing to the new Beltzville State Park, I overheard two men in a boat passing several wood duck nesting boxes that had been erected along the shore line. The one gentleman asked his friend what those gadgets were, meaning the wood duck boxes. With a voice of authority, his buddy answered, "Channel markers."—District Game Protector C. E. Burkholder, Weatherly.



## Voice in the Wilderness

**MONTGOMERY COUNTY** — The following is a quote from *Sand County Almanac*, by Aldo Leopold: "Now we face the question whether a still higher 'standard of living' is worth its cost in things natural, wild and free. For us of the minority, the opportunity to see wild geese is more important than television and the chance to find a pasque-flower is a right as inalienable as free speech."—District Game Protector B. J. Schmader, Collegeville.

## That's Duck Hunters, All Right

**FOREST-WARREN COUNTIES**—Two Marienville duck hunters shot about three boxes of shells, swam in ice water for over an hour after a crippled duck to get it where they could finish it off, putting up with laughter from the sidelines through it all, and for what—a female bufflehead! I hear they ordered a Labrador for next year.—Land Manager D. W. Gross, Marienville.

## Halifax Helpers

The Halifax Area High School sophomore class planted 8000 evergreen seedlings on backfilled strip mines on State Game Lands 264 near Lykens. These boys and girls did a very good job on rough terrain.—Land Manager B. D. Jones, Dauphin.

## Impossible!

**INDIANA COUNTY**—After 22 years of service with the Game Commission I have finally gone through a hunting season without a single complaint about small game conditions. Indiana County hunters appeared to be satisfied with what went into the game bag. Many reports of limits in rabbit, grouse, and pheasants were received.—District Game Protector C. Hertz, Marion Center.

## Bathing, Maybe?

**LANCASTER COUNTY** — I have had two reports of trappers catching screech owls in muskrat traps. This would not be so strange, except that in both cases the traps were body-gripping types set underwater in muskrat burrows.—District Game Protector T. L. Fox, Ephrata.

## Proves a Point

**LANCASTER COUNTY** — Hunter Safety Instructor Jim Spicer has one really "explosive" question. After emphasizing the point to always check for a loaded gun, Jim asks for a volunteer to demonstrate sight picture and trigger squeeze. Only two students in seven years bypassed the fireworks by opening the bolt to find a blank cartridge.—District Game Protector R. E. Gosnell, Millersville.



## Try It—You'll Like It?

**ERIE COUNTY**—Recently, Deputy Gay saw a man shoot a protected bird. The deputy asked to see his hunting license. The man stated he had none, that this was the first time he'd ever hunted and he wanted to try it to see if he liked it before buying a license.—District Game Protector A. C. Martin, Erie.

### Didja Lend Him a Dime?

**INDIANA COUNTY**—As I walked down the street one day, a man jumped out of his car and said to me, "Hey, are you a policeman?" "No," I said, "I'm a Game Protector." "Good," he replied, "I don't have any change for the parking meter."—District Game Protector J. E. Deniker, Indiana.

### Aw, Come On, Now

**CLINTON COUNTY**—Recently I had a call from a woman who was concerned about the health of her dog. It seems she had, for the first time, seen the inside of her dog's mouth and she was all excited because it was black and white. She was certain the dog had contacted "roof and mouth" disease.—District Game Protector C. F. Keiper, Renovo.



### Tellers of Tall Tales!

**JUNIATA COUNTY**—A group of hunters were discussing their hunting efficiency. One claimed he had a room full of trophy deer antlers, and another stated he had pickled two quarts of rabbit hearts. But they all shut up when one hunter stated he kept the beards from his turkeys and he had three bushel baskets full and was started on the fourth!—District Game Protector R. P. Shaffer, Mifflintown.

### Road Kills Up

**PERRY COUNTY**—From January 1, 1971, to April 30, 1971, 51 deer were killed on the highways in this district. During the same period in 1972, 72 deer were killed. Is this increase in the number of road kills due to an increase in the size of the deer herd or are the deer just spending more time near the highways? — District Game Protector L. L. Everett, Newport.

### Cut 'Em Off at the Pass!

**HUNTINGDON COUNTY**—During a tour of State Game Lands 251 recently, Pittman-Robertson Area Leader Dale Stitt and I broke off from the tour to try to apprehend a man driving a trail bike over the Game Lands. My young son, a passenger in the rear seat, got all excited and said he thought that sort of thing only happened on "Adam 12."—Acting Game Protector C. E. James, Orbisonia.

### High Steppers

**FULTON COUNTY**—I was waiting in a diner to meet two other officers. The man beside me told me of a lake back home where the snapping turtles got real bad. They would grab the ducks by the feet and pull them under. Finally the sportsmen and Game Commission had to erect boxes on stakes all over the lake. When a duck saw a snapper coming, he could jump into a box.—District Game Protector C. E. Jarrett, McConnellsburg.

### "Dumb" Animals?

**ERIE COUNTY**—While patrolling the first day of the early season, I noticed two red squirrels run across the road in front of me. I stopped to see where they had gone and saw them sitting in the front yard of a cottage—one on top and the other on the side of a "No Hunting" sign. — District Game Protector R. W. Meyer, Fairview.

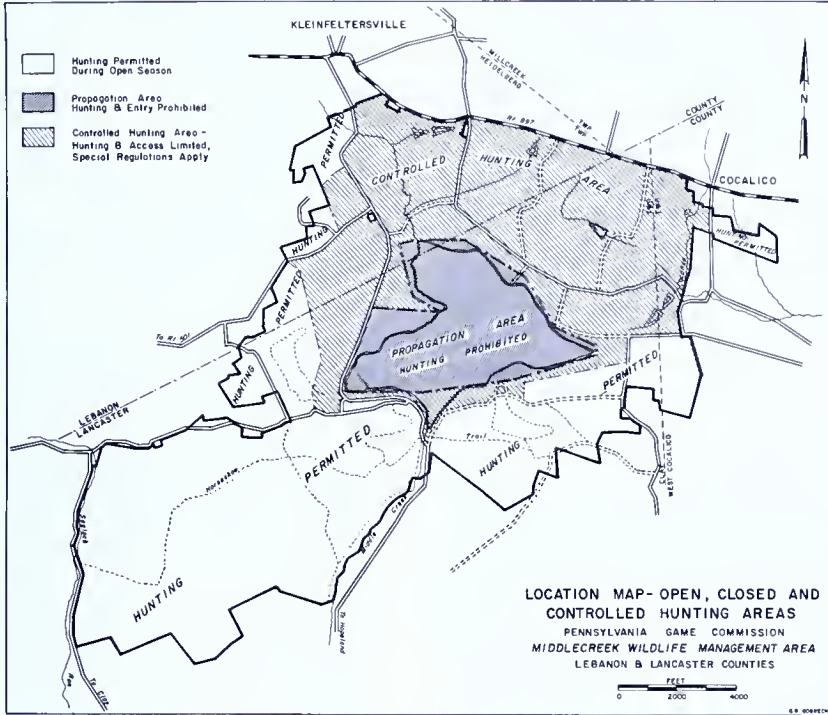




# CONSERVATION NEWS



By Ted Godshall



## Middle Creek Closed to Some Hunting in 1972

**T**HE Pennsylvania Game Commission has adopted new restrictions governing use of the Middle Creek Wildlife Management Area in Lebanon and Lancaster Counties which will close a major portion of the area to small game and regular archery deer season hunting this fall.

Development and construction of the wildlife management area are in their final phases, and the new rules and regulations are designed to provide maximum recreational opportunities while at the same time affording

necessary protection to wildlife on the area.

Under current plans, the entire tract will be closed to the hunting or taking, by any means, of migratory waterfowl until such time as the construction and development of the area are completed and rules and regulations for the hunting thereon of migratory waterfowl are promulgated by the Game Commission.

The taking or killing of birds of prey (falcons, hawks and owls) will be prohibited on the entire wildlife

management area, with or without a permit.

The entire tract will be divided into several major new areas. Each area will be prominently posted.

One area will include the ridge portion which made up the original State Game Lands 46, plus some of the fringe areas of the new waterfowl project. This will make up the public hunting area and will be set aside for public hunting of all species except migratory waterfowl during the open seasons.

Another section will be designated a propagation area, in which no hunting will be permitted.

A third section will be designated a fishing area. It will include a portion of the main impoundment at Middle Creek and will be located just south of and adjacent to the propagation area.

In the fishing area, fishing will be prohibited at all times from the breast of the dam, and except from the shore and through the ice, during the period September 15 to May 15, both dates included. Fishing will be permitted from boats or canoes propelled by oars or paddles from May 16 to September 14, both dates included. Wading will be prohibited in the fishing area.

The final section will be designated a controlled hunting area. This will

include nearly all of the tract which is being used for waterfowl development.

Pennsylvania's open season for hunting migratory waterfowl usually begins in October and runs for a period of about two months. During this period, the controlled hunting area will be closed to all entry, hunting and taking of wildlife, training of dogs and fishing.

It is during this period that Pennsylvania's early and regular small game and archery deer hunting seasons usually fall, and this will effectively close the Middle Creek controlled hunting (waterfowl project) area to archers and small game hunters this fall.

In the future, after the season closes for hunting migratory waterfowl, on the controlled hunting area it shall be permissible to:

- (a) hunt small game during the extended small game season;

- (b) hunt deer during the regular antlered, antlerless and late archery seasons;

- (c) trap for furbearing animals during the open trapping seasons;

- (d) train dogs following the close of the antlerless deer season until March 15;

- (e) enter and hike on designated trails on the area.

## **Over Five Million Seedlings Planted**

Wildlife in the state will benefit from over 5.6 million seedlings planted throughout Pennsylvania this spring. The seedlings were produced at the Pennsylvania Game Commission's nursery at Howard in Centre County.

Sportsmen's groups, conservation clubs, soil and water conservation districts, landowners cooperating in programs of the Game Commission designed to keep private holdings open to public hunting, coal stripping operators and others received seedlings which will provide future food and cover for wildlife.

More than half of the seedlings were planted by Game Commission personnel on State Game Lands, tracts purchased with funds derived from the sale of hunting licenses and maintained as public hunting areas, and on farm-game projects, private land which is kept open to public hunting.

The seedlings are provided free of charge by the Game Commission, and planting and maintenance for the benefit of wildlife are usually provided by interested sportsmen and landowners.



# Loaded Guns Now Banned in Vehicles

An important amendment to the Pennsylvania Game Law now prohibits the possession of a loaded firearm in a vehicle.

Previously, the Game Law prohibited having a loaded rifle or shotgun in a vehicle on or along a public highway, but the new amendment is much more inclusive and, in effect, bans loaded firearms of any description from all vehicles anywhere in the commonwealth, with few exceptions.

Under the amendment, a "firearm" is defined as an instrument used in the propulsion of shot, shell, bullet or any other object by the action of gun powder exploded, explosive powder or the expansion of gas therein.

The term "firearm" will include all rifles, shotguns, revolvers, pistols, gas-powered and pneumatic pellet guns, B-B guns (except spring operated), etc.

A firearm is defined as being "loaded" if there is a cartridge or shell or projectile of any description in either the firing chamber or the magazine of the gun.

Some hunters remove the cartridge or shell from the firing chamber but leave one or more cartridge(s) or shell(s) in the magazine, thinking that the gun is "unloaded." This is not the case. All shells or cartridges must be removed from the firing chamber and the magazine before the gun is legally "unloaded."

A loaded firearm may not be in or on any vehicle or conveyance (including a snowmobile) or its attachments while standing, or being driven, within the commonwealth.

A vehicle or conveyance would include any automobile, truck, pickup, motorized camper, jeep-type equipment, tractor, ATV, motorcycle, motorbike, motor scooter, trailbike, etc., and attachments to vehicles would include trailers, non-motorized campers, boats being towed, wagons, sleds, etc.

A sportsman who has a permit issued by a county treasurer for the purpose of carrying a handgun for hunting or fishing may not, under the amendment, have the handgun loaded in a vehicle under any circumstances.

The Game Law amendment does not apply to a person authorized to hunt or trap without a license when the person is on lands on which he resides, such as a farmer.



*Photo by Bob Clever*

**ROGER LATHAM**, outdoor editor of the *Pittsburgh Press*, and wildlife artist **Ned Smith**, center, talk with Mrs. Bob Clever and Bob Holmes during workshop at Pennsylvania Outdoor Writers meeting in Wellsboro.

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## Big Fellows

Mature American bald eagles sometimes measure 40 inches from the end of their yellow beaks to the tip of their white tail feathers.

## Over 186,000 Mallards Released in 21 Years

**P**ENNSYLVANIA, the leading state in the Atlantic Flyway in the harvest of mallard ducks, has raised and released more than 186,000 of these birds in the 21-year history of the State Wild Waterfowl Farm near Conneaut Lake in Crawford County.

Starting in 1951, the Game Commission has raised and liberated 5000 to 10,000 or more mallards each year.

Prior to release, the birds are banded, and then are shipped by truck to District Game Protectors all over the Commonwealth. The ducks are then released on suitable waterfowl habitat.

During the 21 years, bands have been recovered from 20,525 of these mallards.

While about 82 percent of the bands recovered from these hand-reared ducks come from Pennsylvania, studies show that these waterfowl have spread throughout the eastern U. S. and Canada, and as far away as Alaska and Jamaica.

About 95 percent of the bands recovered are returned to the Game Commission by hunters.

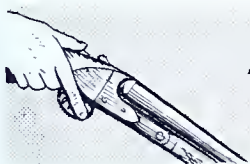
No other state has a wild waterfowl propagation program as ambitious as Pennsylvania's.



## Sample GAME NEWS Copies

*Do you have a friend who is interested in Pennsylvania's outdoors but is not a GAME NEWS subscriber? Perhaps he'd like to see a copy. Send us his name and address and we'll be glad to mail him a free copy of a recent issue of the magazine. Hopefully, we'll get some new subscribers—and maybe your buddy will stop "borrowing" your copies!*





# HUNTER SAFETY EDUCATION



By John C. Behel  
PGC Hunter Safety Coordinator



*Photos by Paul J. Gouldy*

**WOODEN GUNS AND SHOUTED "BANGS"** may seem a long ways from the real thing, but they, and simulated hunting conditions, help teach hunter safety.

## The Hunt in Hunter Safety

By Gifford L. Briner

**T**HERE'S NO iron-clad guarantee, of course, that after a hunter safety student passes his written exam he is 100 percent safe to hunt with. Book and classroom learning can be one thing. Actual field learning quite another.

What will this youngster's reaction be, for instance, the first time a wily old cockbird busts loose at his feet? Will he remember what he's been taught about zone of fire . . . or to heed that Safety Zone sign he just passed?

The members of at least one service organization providing the mandatory hunter safety course for all first time hunters under 16 in Pennsylvania can be a little more assured these junior hunters are safe partners in the field—they've "hunted" with them!

This organization, the Dillsburg Jaycees, has developed an interesting hunter safety course over the past few years that could be considered one of the most comprehensive in the state. It requires a full 10 hours to complete (four hours are mandatory in



**INSTRUCTORS TAKE NOTES** on each boy's safety precautions as they cross creeks and face up to other situations often encountered while hunting.

Pennsylvania), with sessions split into four classroom lectures of 1½ hours each and two outdoor classes of two hours each. An average of 60 students per year are certified in two courses.

The first two classroom sessions cover such basics as knowledge of sporting arms and ammunition and safe handling of sporting arms. Lectures are accompanied by actual demonstrations and slide presentations of subject matter.

Then comes the "hunt." Instructors have set up a field course which, although it is actually a mock hunt with wooden guns and colored balls for legal game, satisfactorily demonstrates a student's knowledge in all aspects of hunting and hunter safety. Students are instructed that, for all practical purposes, these are real guns and real

game they will be dealing with. They are graded on their performance. An instructor assigned to each student records and rates him on a prepared form. (Group size during the "hunt" is limited to four or five students at a time.)

Each hunting party is introduced to the "property owner" at the onset of the hunt. Students are then handed wooden guns ("loaded") and proceed onto the field course. Instructors, meanwhile, have noted whether each student asked permission to hunt; if he checked his gun to see if it was loaded when handed him; and if he discussed zone of fire with his hunting party.

### **"Legal" Game**

During the first part of the hunt, in an open field, students are confronted with "legal game" (colored balls thrown into the air or along the ground) which can be shot at and claimed by calling "bang." Each instructor records his student's knowledge of zone of fire and general safe gun handling technique.

After hunting the open fields, students must cross a bridge single file (instructors noting gun carry). They then are graded on their reaction to legal game running toward a busy highway. Students are also faced with a situation that involves running with a loaded gun.

The hunt continues through a wooded area where students again meet legal game. In this area they also must cross a fence and a real stream with steep banks. At the stream, hunters have an opportunity to take an easy shot at a "duck" sitting on the water. (They'd better not shoot!)

Next, students pass through an area posted with "No Hunting" signs where they are tempted by legal game (some students never see the signs). They then take a rest break where their gun handling techniques are rated by instructors. When the hunt continues, students pass through a posted "Safety Zone" and are again tempted by legal



"game." Near the end of the field course, students must climb a steep bank where safe gun handling again is graded.

At the hunt's conclusion, an instructor explains to each student how he conducted himself and the mistakes he made. The field course score, along with the regular written examination score, is used as a basis for certification.

The field course naturally entails extra time and work for the Dillsburg Jaycees, but they feel it is well worth the effort.

As one Jaycee instructor put it, "Just because a student memorized facts from a book and then got 100 percent in his written exam is no guarantee he's a safe hunter. A student this age might in a short time forget something he sat and heard in a classroom lecture; but he'll be a long time forgetting what he had to actually act out after learning it."

After the field course "hunt" the Jaycee hunter safety course continues with two more evening classroom sessions. The first focuses on hunter responsibility with emphasis on safe clothing, game laws and hunter-landowner relations; the second gives students the opportunity to hear District Game Protector R. W. Ruths, who also has to field a bevy of "stickler" questions on the Game Law. During this

## **GAME NEWS Binders Available**

Binders which will hold a year's issues of **GAME NEWS** are available from the Pennsylvania Game Commission, P. O. Box 1567, Harrisburg, Pa. 17120, or from any of the six field division offices. The price is \$2 delivered.

last classroom session students take their written examination.

Students get their first official crack at firing a gun during the last course session. This is a trap shoot held at the Dillsburg Rod and Gun Club. Each student is allowed one shot at a clay target from each of the five stations. He is carefully graded on live gun handling by an individual instructor.

The moment of truth for the student comes after the live shooting. If he received a grade of 90 percent or better on his written exam and completed the field course satisfactorily, we feel he's earned his hunter safety certificate.

What do the students think of this course? "Easy," most of them reply.

But regardless, we bet they're safer hunters than most, just the same.

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## **Turkey Calling Contest**

This year's State Turkey Calling Contest will be conducted at the Franklin County Fairgrounds on August 26, 1972, starting at 10:30 a.m. Trophies and cash prizes will be awarded to Pennsylvania winners and also to out-of-state contestants. Each participant will be scored on his ability to putt, yelp, whistle and gobble. Additional points can be gained when a contestant demonstrates his individual specialty.

## **Keeps Him Busy**

The bull moose attains a maximum weight of approximately 1400 pounds, but he has to eat from 40 to 60 pounds of food daily to do it.

# *The Cicada Is a Drummer*

By William Wagner



**A**S ANY outdoorsman knows, the sounds of summer are many. Most people are familiar with the crickets, katydids, and countless other insects that fill the air with their "music" during the warm evening hours. But the champion noisemaker of this type is the cicada.

This large, robust insect with the broad head, protruding eyes, and transparent wings, produces his summer music in a unique way. His hollow air chamber, located in his abdomen, contains a powerful cluster of muscles called the tympanals. These muscles have a kind of "drumhead" attached. These produce a loud, continuous song when the muscles are released from a tightened position and the drumhead strikes membranes which line the abdomen walls.

Cicadas do not damage trees as do true locusts. However, they do lay their eggs in pierced slits in small twigs and branches. This may weaken the branches if several deposits are made on one tree.

The young "drummers" hatch from the eggs a few weeks after oviposition. They make their escape from the

branch, fall to the ground, and rapidly dig in out of sight in a little burrow near the roots of the tree.

Most of the cicada's life is spent underground (some species up to 17 years), where it lives off nourishment found in the tree roots. Since it is necessary for the cicada to obtain sap from tree roots in order to live, its mouth is adapted for sucking by means of a hollow, downward-extending tube which looks much like a soda straw.

Not only is the cicada strange looking, but he also is one of the few insect species to have a hearing organ.

The 17-year cicada may molt up to 30 times before reaching the adult stage. The forelegs of the larva are smaller than the other legs, and resemble the cutting jaws of biting insects. They are designed especially for digging and transporting earth.

When these insects reach the pupal stage, they begin to push their way to the surface of the ground, and upon emerging, crawl up shrubs and trees. When they reach a likely spot on the tree, the skin on the cicada's outer shell splits, and the adult insect emerges. Often they reach the ground surface too early in the day, so they simply construct a chimney of dirt

**THE CICADA, a champion noisemaker, spends most of its life underground, though its eggs are laid in slits made in small twigs or branches.**





around the hole and wait until evening.

After it leaves its underground home, the life expectancy of the cicada is very short. It must fly about from tree to tree in search of a mate. The long, loud buzzing ("drumming") that one hears on an early summer's evening is actually a love call sent out by a male looking for a mate. However, swarms of these unusual insects never get to mate, for many birds feed on them and countless thousands are destroyed each year, often before they lay their eggs.

The cicada is also hunted by the cicada-killer wasp. This wasp, with the aid of a powerful sting, paralyzes the cicada, then carries it through the air to its underground burrow. Carrying the cicada is no easy task for the wasp, for the cicada will weigh nearly as much as the wasp. With the cicada clutched tightly, the wasp will climb a nearby bush to gain altitude. The flight may cover only five or six feet before the weight of the cicada forces the wasp to the ground. It will then climb another shrub and start once again. Once in the burrow, the queen will lay her eggs on the paralyzed

## Moving?

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cicada. When the eggs hatch, the young wasps will feed on the cicada's body.

There are about 20 different broods of cicadas in the United States, each coming out of the ground on its own timetable. Cicadas usually are seen and heard throughout the United States during the months of June, July, and August.

Ancient Greeks thought the cicadas were divine. They kept them in small cages, wrote poetry about them, and wore cicada images as hair ornaments.

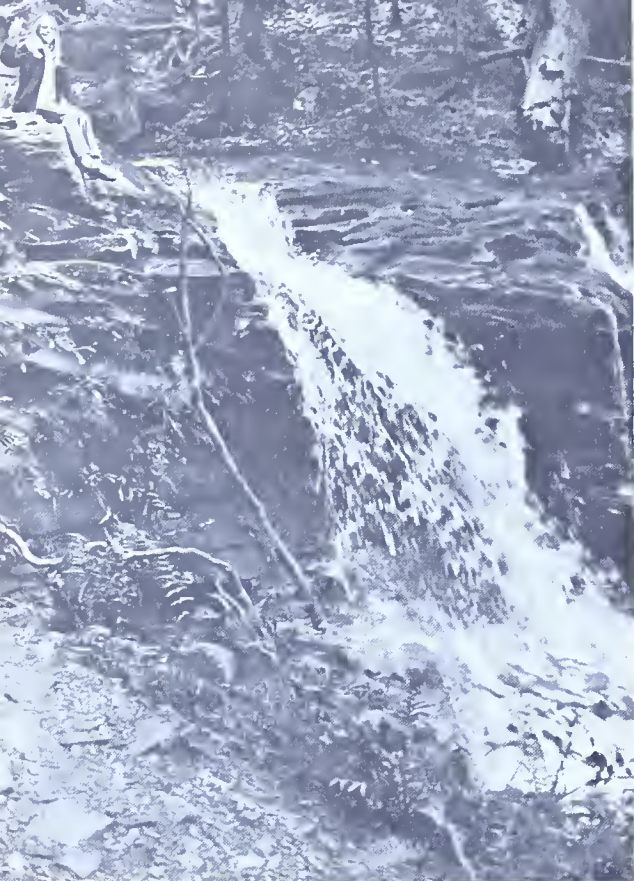
Their high regard for these insects is indicated by the fact that the emblem of the science of music was a cicada upon a harp; and the song of the cicada was the name given to the sound of the harp.

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## Book Review . . .

### "American Axes," by Henry J. Kauffman

This is the first book to deal specifically with American axes, a subject which in many ways is oriented around this country, for much of the evolution of this prehistoric tool resulted from the necessity to clear vast tracts of land on this continent. It should have further interest for Pennsylvanians, as Prof. Kauffman resides in Lancaster and some of the greatest axe-making companies have been, or are, located in Pennsylvania. Background begins with the prehistoric eoliths or stone tools, which had no handles, then moves through those of flaked stones, copper and bronze to iron and steel. Early manufacturing methods of basic types are explained and illustrated, and there is an extensive directory of American axe makers. Of special interest is a large portfolio showing 52 examples of old axes. This fascinating volume should lead many collectors into this field. (*American Axes*, by Henry J. Kauffman, Stephen Greene Press, Brattleboro, Vt. 05301, 151 pp., 8½ x 11, 1972. \$12.50.)



*Rountree Wants to Know . . .*

## ***Is Anyone Home This Summer?***

**By Les Rountree**

**AMERICANS WILL SPEND over \$100 billion on recreation this year, but many forms of outdoor enjoyment—such as hiking—cost almost nothing.**

**W**HAT'S THE biggest business in the United States? The automobile combine? Steel? Defense contracts? All wrong! More money is spent on recreation than the total value of our country's exports! It exceeds the total corporate profits of all companies in America. This figure will easily top \$100 billion this year, according to "U. S. News and World Report," April 17 issue, and the end is not nearly in sight.

Last year, according to the United States Bureau of Outdoor Recreation, 82 million people went picnicking, 49 million went fishing, 35 million went camping and over 20 million went hunting. Those who participated in horseback riding, bird watching and wildlife photography also number in the millions. There is some overlapping to be sure, but the blunt fact is that almost half of our entire United States population did something out-

doors last year. If you doubt that camping and mechanized touring are not part of a giant trend, take a visit to the nearest four-lane expressway and start counting the recreational vehicles that drive past during a 15-minute period. It's astounding!

In spite of higher taxes, higher prices and the general grumbling with the state of the country in general, the American citizen still has leisure time and money to participate in the "great escape." Ecologists, conservationists and preservationists have done their job well. They have been telling people to get away from the grime and gloom that is stifling our cities and, to a degree, our suburban communities, and get out where the grass is green and the air is pure. And by gosh, we're doing it! We're doing it at such a rapid rate that public facilities just cannot keep pace with it. As quickly as a new state or federal camping accommodation is opened, it becomes strained to capacity during peak summer seasons. The backpacking subdivision of the overall camping game has increased to the point that some



wilderness areas will have to be restricted to a limited number of campers if these sections are to remain "wilderness."

As a Pennsylvanian like most of you, I gripe and grumble over what some of our elected and appointed officials do from time to time, but the broad picture of recreation indicates that our state is holding up amazingly well. State and federal land in our commonwealth totals over five million acres. Fortunately, we have the land to provide adequate camping, fishing, hunting and hiking for our residents and visitors . . . at least for the immediate future.

The long-range forecasters, including this one, just don't know what will happen in, say, 15 years. Will population continue to increase at its present high rate? Will the trend toward more in-country travel keep spiraling upwards? Planning can be done with considerable effectiveness in regard to wildlife and land use, but the big unanswered question is, how many people will we have to provide for? My personal estimate is that we won't see, in our lifetimes, a drastic cutback in population growth. People will continue to demand more of the good life and that means more public and private money must be spent in figuring how to provide them with it.

The most important consideration in providing more of this good life is money. How are we going to build more parks, campgrounds, swimming pools, picnic areas and highways to reach them, while at the same time hang onto public hunting acreage, fishing rights and wilderness hiking trails, and also protect and manage the wildlife and natural resources that

are an integral part of them? The answer is an extremely simple one. *We must all be willing to pay for it.* This business of hitting the public for more money is an extremely tricky one, as any politician can attest to. Raising taxes or fees by any governmental agency is risky for the individuals who sponsor the hike. They must have a sound case or the man in the street rejects them at the ballot box the next time around. I'm not running for public office (thank goodness) but my guess is that the outdoorsman will be willing to pay a larger share of his fare if the facts, properly stated, are presented to him.

### Sportsmen Pay Way

The hunter and fisherman usually goes along with a boost in license fees after the votes are counted. In most states, and it is the case in Pennsylvania, the dollars taken in from license sales are applied directly to the betterment and protection of his chosen sport. In very few states do the general taxpayers provide any money for the management of game and fish. Yet, the camper and the traveling motorist derive considerable pleasure from seeing wildlife and the acreage that is maintained by the conservation agencies.

In addition to the license fees the shooter and the fisherman pay, an added tax is tacked onto every box of ammunition and sporting firearm and all items of fishing equipment. These monies go into the Dingell-Johnson Fund and the Pittman-Robertson Fund for distribution to the 50 states according to a formula based on total sales of hunting and fishing licenses and land area. The money is administered by conservation agencies for the management of fish and wildlife. There have been attempts to remove this tax, but each time it's tried the sportsmen have requested that it be continued. One of the few times that people have actually asked to be taxed! The Federal "duck stamp" is another



example of an earmarked fee. Every duck hunter must have in his possession a \$3 stamp (soon to be raised to \$5). This money is specifically used for waterfowl management. The duck hunter pays his own way.

Perhaps the campers and the owners of the hordes of recreational vehicles could ask for a similar tax to be imposed on them. If the money were selectively earmarked for the improvement and creation of recreational facilities and the user were convinced that this would be so . . . such a tax could be levied in a reasonably painless manner. Some of the people who manufacture rec/vees are encouraging a "use" tax too. John Ebeling, public relations director of Winnebago Industries, one of the nation's largest motor home builders, has long encouraged a federal fee program whereby the states would share in the revenue derived from recreation vehicle owners.

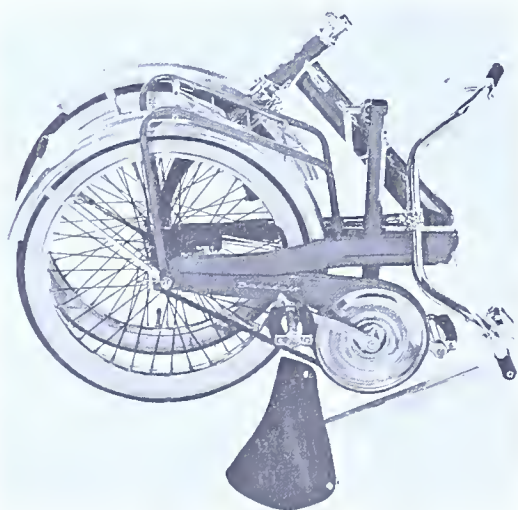
The number of snowmobiles, trailbikes and all-terrain vehicles will proliferate tremendously in the years ahead. By the end of 1971 there were close to a million and a half snowmobiles in the United States. The industry is forecasting sales of another

half million this year. Over two million minibikes are rumbling around right now and doubtless there are many more to come. ATV sales will also be in the millions within a few short years. Like them or not, they are a fact that is with us and while more restrictive legislation is in the mill to regulate them, they have become a part of the outdoor scene. But . . . in many cases, they are getting a free ride. Some states do not even require licensing them. Since they do not use the highways but instead compete for the same landscape that the rest of the recreationists want to use, I feel they should be required to pay in some way for that privilege. And it is a privilege. Talk as we will about our pioneer heritage and this and that *right*, we live in the heavily populated East and everything we do outdoors affects something that someone else does. There must be regulations on camping, motoring, snowmobiling and trailbike riding. We have too many people wanting to use the same acreage to allow everyone to do just as they jolly well please. I'm convinced the mechanized outdoorsman should be selectively taxed too.

### Swing to Bike

One upward surge that does please me is the swing back to the bicycle. Federal figures show that 37 million people went cycling last year, and more are expected to this year. Sales of the two-wheelers topped eight million in 1971 and the forecast is for more this year. Cycling is a great way to see the countryside and a fine way to take an extended camping trip. With saddle bags and a lightweight pack, a lot of miles can be covered in a week and the new collapsible bikes allow you to take one along on any motor trip. For short jaunts, bicycling is inexpensive and keeps the muscles from getting flabby.

Canoeing is coming on strong too, and with more impoundments that are restricted to wind and paddle driven



**FOLDING BICYCLE** can be taken along in motor camper. This one is made by Gloy's, 10 Lewis Street, Greenwich, Conn. 06831. Sets up in 30 seconds.



craft being constructed, I expect that canoe sales will double in the next two years. Pennsylvania has some great canoeing rivers and I can't think of a more interesting way to camp. Enough gear for a two-week trip for two people can easily be stowed in a 14- or 16-footer—and what photo possibilities! Until you try it you can't believe how close wildlife can be approached via canoe. Pine Creek, the Juniata, Allegheny, Susquehanna and Delaware rivers and a host of smaller streams offer topflight adventure.

### No Passing Fad

The leisure boom that is sweeping the country is not just a passing fad as some writers thought it might be a few years back. It is with us and it's going to grow faster than the statisticians can sharpen their pencils. The rate of growth keeps breaking all records and even the producers of camping gear and other leisure related products keep falling short on their predictions. Somehow we've got to keep our equilibrium during the next dozen years or as long as the boom lasts. We must psychologically prepare ourselves as campers to accept the reality of more people wanting to do what we want to do. The more popular camping areas will be crowded. More restrictions will be imposed at state and national parks, particularly the latter. Rates for all camping services will go up in price and it's extremely unlikely that the cost of camping supplies will go down. Even with increased sales it is difficult to believe that prices for gear will remain static.

The tent or the backpacker is still in good shape as regards less sophisticated areas to pitch his tent or unroll his pack. The individual who has to park a tent trailer, travel trailer, motor home or pickup camper will not be faring so well this summer. With an estimated 700,000 more wheeled campers of various configurations on the road this year, the competition for the



**LARGE MOTOR HOMES** are seen more each year, provide luxurious living compared to a backpacker's mummy bag and mountain tent.

choice locations is bound to be keen.

If you, I and the other several million people who are out cruising this year in a rec-vee of some kind want a place to park next year, we will probably have to help pay the tab in some way. All 50 states are in the same boat. If they are going to create more and better state owned and operated facilities, someone has to foot the bill and the noncamping taxpayer will probably balk at doing it. Painful as it might seem, we have to ask the people in high places to suggest some more fees or taxes. Maybe private industry will come to the rescue and provide more camping areas designed for rec/vces. I rather doubt it, however, since most tourist attractions are situated on or near state or federal property. They own the best sites and are in a better position to manage and maintain extensive facilities.

A couple of Presidents ago, we were all invited to "See America First." By gosh, people listened and that's just what we're all trying to do. With a little more planning and a few more parking places, we all just might do it!

*The Woodchuck, for a . . .*

# DINNER DATE

By Keith C. Schuyler

*Photos From the Author*



**YOUNG WOODCHUCK** makes fine eating when properly prepared. For best reception in kitchen, skin, remove glands and cut into serving pieces before presenting to the cook!

**C**RITICS OF hunters and hunting get their best licks in regarding the shooting of wildlife just for the sport. Sentimentalists usually wind up with something like, "I just don't see how you can do it!" A smart alec answer might be, "It ain't easy." But a better reply is needed, for the way each hunter disposes of the carcass of any creature shot in the name of sport, does give a clue to his inner response to the enticement that hunting pre-

sents. No matter how we try to justify it, a rotting, fly blown carcass exposed to the casual eye puts a blot on the hunter and on hunting. Unfortunately, such individual onus extends to all hunters, all hunting. It makes no matter that the removal of a woodchuck, an opossum, or one of the other creatures which compete with man or more favored wildlife species is a service.

Any player accepts the fact that he isn't going to win every hand. But if the winner gloats over his good fortune, it turns everybody off regardless of how much the win might be deserved. Allowing any carcass to lie or hang where it is likely to be seen completely stripped of its dignity as a living creature reflects upon the manner of its death. It is a form of gloating, it is unbecoming to the sport of hunting.

There is another way, or ways. If the carcass is edible, invite it to dinner.

With the summer woodchuck season at its height, now is a good time to give consideration to making the most out of your bow hunting. If you haven't tried it at the table, don't look down your nose at old *Marmota monax*. Or possibly we should say young *M.m.* For it is the young chuck which makes the best eating. The usual one taken by bow hunters is on the smallish side, anyway, since these are the least educated. By the time they get big and fat, they are much tougher targets by virtue of their ability to detect the presence of the hunter. These are more likely to fall to a long shot from a rifle by such as our editor



Bob Bell or Don Lewis, our gun editor (or, more probably, his wife, Helen).

Eating woodchucks is nothing new. Although one *authority* claims that the chuck is not eaten to any extent by man, this certainly doesn't hold true across Pennsylvania. The practice was much more widespread some years ago, but many still relish the flesh of the pasture pig. During the depression years of the 1930s, woodchuck was frequently the *piece de resistance* at many a meal in rural and semi-rural areas. At the price of meat today, anyone who throws away the carcass of a chuck that hasn't been too badly shot up is passing up a table trophy that is free for the asking.

Woodchucks were quite popular among the Indians since they were no match for the patience and hunting skill of the Red Man. Not only did the Indian relish the meat, he made good use of the rather coarse fur and hide.

A properly roasted woodchuck tastes somewhat like roast beef. Like most furbearers, however, this animal has musk glands which are found in what might be considered the armpits of the forelegs. They are seen as reddish nodules, and they should be cut away. Otherwise they can impart a strong taste to the meat. Harder to find are glands along the spine near the rump. Also, the ever-present fat should be well trimmed.

Since an arrow kills by hemorrhage, there is no need to soak meat so taken in any solution. It is more important to skin the carcass and get the meat cooling as fast as possible. During the better hunting months of spring and summer, this can be a problem. Although eviscerating the animal immediately after the kill is advisable at any time of year, removal of the fur-

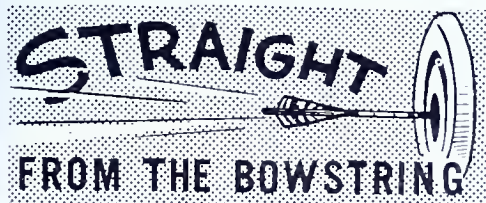
covered hide is just as important. If you are hunting around home, and you are satisfied with one animal, this poses no problem. However, if you are on an all-day hunt, or one covering a considerable part of the day, possibly a long way from home, preservation of the meat calls for preparation.

### Refrigeration

One of the simplest ways to be sure of sweet meat is to carry some type of refrigeration with you. Those with well-equipped recreational vehicles may have no difficulties if they have a refrigerator. But it is more likely that the average hunt for woodchucks is a casual trip before or after work. On the usual jaunt, one of the relatively cheap styrofoam coolers will do the trick. It might be a good idea to dump a tray or two of ice cubes into it several hours before planning to leave. Then, dump the water out and add more cubes before actually taking off on the hunt. This will insure that there will be a minimum of water, which is bad for any meat. To be on the safe side, it is well to carry a perforated plastic bag or two to drop the field dressed and skinned carcass into before placing it on the ice. In any event, some cover for killed animals should be carried to keep flies away.

Too often the cook at home will get the idea that there is some great mystery about cooking wild game of any kind. Generally speaking, there is little difference between cooking either domestic or wild animals. It is advisable to use somewhat lower heat for a longer period as fine-grained wild meat has little natural fat that is usable. Using too high a heat will cause the meat to cook too quickly on the outside and flesh near the bones will not be palatable.

A small woodchuck can be cooked by dry heat—broiled or fried. Larger, tougher specimens can be made delectable by braising, stewing and simmering.



Everyone expects pork to taste different than beef. Each domestic animal has its own flavor. The same is true of wild meat. Adding bacon and other domestic animal fats will change the flavor of wild meat, and the change is not always desirable. Any wild meat is good eating if the carcass is properly prepared in the field. Aging it in the refrigerator will heighten the flavor of the individual animal if this is desirable. But those who turn up their noses at the woodchuck should be aware that beavers, raccoons, opossums and muskrats are all considered fine eating by those who take the time to properly prepare them—in the field and in the kitchen.

### Good Diet

And why shouldn't the woodchuck be excellent eating? His diet consists of the same foods that produce good milk and excellent beef. He will eat fruit in season, grain, clover and almost any other grasses when available. He is a fastidious housekeeper. There is nothing wrong with a woodchuck for dinner fare except in the minds of those who have an aversion to any meat that doesn't come out of a butcher shop.

If you are sold on the idea of at least trying to take a woodchuck to dinner, the next step is to set up the invitation.

One of the best ways to find out where there is good hunting is simply to ask. At one time farmers might have been caught between a laugh and a suspicion that an archer was up to no good if he asked permission to hunt with the bow and arrow. Today the sport is well enough established that you are more apt to receive a serious welcome. Rare is the landowner who isn't happy to have you reduce the woodchuck population. He is usually quite aware of the best hunting areas on his property and can give you good directions.

Actually, it is the modern farmer who has unwittingly encouraged the

great increase in the animal's numbers. When settlers first came to this country there were no such great areas of open land with the excellent forage upon which the woodchuck feeds. It was an animal of the forest, hence its name. According to the *Hunter's Encyclopedia*, it was immigrants from Devonshire who attached this cognomen to the furry rodent they found squatting or standing alertly at tell-tale diggings in the forests. The word chuck in their dialect meant "little pig." The French called him *siffleur*, whistler, after the sound so familiar to those who have hunted the animal extensively. Others picked up both names and changed them to *ground-hog*, keeping the porcine appellation but further identifying the creature by its subterranean habits. Still others combined the French and English tabs and came up with the name *whistle-pig*. In reality, the chuck, as he is best known among hunters in this state, is a member of the squirrel family and is officially a marmot.

He must keep eating, a habit which makes him a vulnerable target in season, for like the squirrel the woodchuck must keep wearing his incisors





down or they will grow right out of his mouth. If the teeth are mismatched, the animal can starve to death. In a celebrated case in New York State, a woodchuck had upper teeth which curled around in its mouth until they had gone almost full circle before penetrating the bone in the roof of its mouth. The lower front teeth extended up past its nose like oversize tusks.

The only reason that the teeth do not grow out of proportion during winter is because of the animal's dormant stage in hibernation. Bodily functions almost cease as temperature goes down to as low as 37° F., according to one authority, and breathing is reduced to about once every five minutes. Nevertheless, since the animal is alive, the body must be served. And it is. The woodchuck feeds almost continuously during the warm months to build up a fat supply which must last it for as much as six months or longer, depending upon the latitude at which it is found.

Strangely, although the female gives birth to from four to nine young, which are born in late spring or early summer, it is not unusual to see quite small woodchucks before this period. This suggests that some animals breed quite late in the year or they have a second breeding. The little fellows grow quite fast and are several pounds in weight by late summer.

### A Great Scurrying

Last year I kept watch on a family that elected to take over the ground floor of our barn. We didn't mind sharing the space, but a big pile of shale and dirt was excavated where we parked some of the lawn equipment. This meant that the chucks had to travel about 16 feet inside the barn, another 12 feet across the entryway to the corn crib, which is about three feet wide at the bottom, and under that, before they could reach grass. Each time one of us would go to the barn on a nice day there would be a



**KNIFE TIP POINTS** to glands which appear as reddish nodules under forelegs. Others are located along rear of back-bone. Must be removed before cooking.

great scurrying. Occasionally, we would see one of the chucks.

By late summer the young chucks had grown to nice eating size and I decided to make a try for one with the bow. I saw one grazing on our nearby pond bank and tried a 30-yard shot without success. The chuck made it to the corn crib, and I waited him out, knowing the route he was likely to take for the safety of the barn. He showed up, testing with his nose, where expected. Slowly he edged out into full view, poised for a dart across the entryway, under the stable door, and thence to his hole. It was a perfect setup—with one exception. A miss or a pass-through would likely bounce my broadhead off the hard dirt into a piece of machinery. I didn't dare move, pinned by the knowledge that he would streak for the door if I did. But when his attention was distracted a moment, I shot. The broadhead hit home.

Although we encourage wildlife around our 11-plus acres, it is not difficult to understand why farmers can become irritated by woodchucks. Some

years ago a family of them moved into the end of a short row of trees next to our house. This wasn't so bad until one decided to tunnel from the front, where the lawn slopes to an area then covered with barberries, under the sidewalk in front of the house. I received little sympathy from my wife, who had warned me earlier, as I had to remove the concrete slab to fill the hole before resetting it.

Having woodchucks in proximity to my own burrow has taught me much about their habits. Their cupidity is amazing. A creature which one time lived only in the remote fastness of our wilderness now parks almost on my doorstep, despite the fact that it is one of the most timid and wary of our

wildlife. The least sound from the house will send him scurrying. It would seem he could never have time to get enough to eat, for eat they must, with a vengeance.

This is all the more reason that a bow hunter should try bringing an arrow-shot woodchuck to dinner. The patience and the skill required to make a kill deserves more than a wasted carcass. And even though the chuck's numbers must be kept thinned, it can add much to the hunt with the knowledge that *M. monax* can provide more than the satisfaction of the shot.

### **Gustatory Enthusiasm**

If you can't whip up any gustatory enthusiasm yourself, it would be worth the effort to inquire around your neighborhood to determine if someone else might appreciate an occasional woodchuck dinner. I know of several hunters who don't eat them but who always take the carcass to someone who does. A carcass properly prepared in the field is much more appetizing than one which is tossed carelessly into the car trunk.

The same is true at your own home. The lady who toils over your hot stove is not likely to become excited over an undressed woodchuck. Even a properly prepared carcass is not nearly as appetizing as one carefully cut up into pieces just right for broiling or frying.

If you still don't want to be bothered with seeing that some human use is made of the chucks you shoot, it is an individual responsibility to make certain that you don't cause offense after the fact. See that the animal is buried, at best, or removed from any chance that either by odor or by sight it might offend, at the very least.

For those who want to complete their hunt, here are some suggested finishing touches:

**Stewed woodchuck:** Recommended for larger specimens. Cut into servings and soak overnight in solution of water and vinegar with a bit of sliced



**A STYROFOAM COOLER**, preferably with ice in it, makes it easy to keep meat sweet until you arrive home during the hot months of summer.



onion. Before parboiling for 20 minutes, wash and wipe pieces dry. Change water after parboiling, add a sliced onion, sliced celery, cloves, salt and pepper. Cook until tender. Add flour to gravy to thicken.

Fricasseed woodchuck: Remove all fat and cut into single servings. Rub with salt and pepper and roll in flour. Cook in hot fat until well browned,

add water, cover, and simmer for two hours or until the meat tests tender.

Woodchuck patties: Remove meat from bones, and grind. Add bread crumbs, onion, salt and pepper, egg, and fat, and mix thoroughly. Form patties and dip into egg and bread crumbs before dropping into hot fat or vegetable oil. When brown, bake in slow oven for about an hour.

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## Wild Animals Are Poor Pets

**B**OOKS ABOUT wild pets and television shows featuring wild animals often lead well-meaning adults and children to want to be foster parents of young wild animals. You are advised to leave wildlife in its natural environment. There are good reasons why regular pet shop species of domesticated animals are much more desirable. Avoid wild animal pets for these reasons:

*They may carry disease.* Exotic wild animals and our own native species can be carriers of diseases to man. Monkeys, especially, can be carriers of dangerous virus diseases of the tropics. Our own native species may be rabies carriers. Young foxes, skunks and raccoons can harbor this disease which is incurable in man.

*They may be dangerous.* Young exotic cats, our own baby squirrels and other baby wild animals unfortunately mature and become undependable misfits capable of inflicting severe injuries. Every year somebody in this country is badly injured by a pet deer. Some have been killed by them.

*They are hard to feed and manage.* Feeding baby wild animals is not easy. Attempts to feed baby squirrels, rabbits and chipmunks are more likely to fail than succeed. It's usually much more humane to let them alone than

to make any attempt to save them.

*They cannot be returned to nature without tragedy.* That baby robin, rabbit, squirrel or quail doesn't stand a chance for survival when the owner tires of it as a pet and then attempts to release it. Even pen-raised gamebirds have as high as 95 percent mortality during the first winter after release. Pet birds have no chance at all.

*They may have legal protection.* Most native wildlife is protected by either state or federal laws. It may be possible to obtain special permits to hold captive wildlife, but be sure to contact state or federal wildlife authorities before you risk an unintended violation of the law.

Last but not least, collecting of young wild animals and trapping of birds is rapidly bringing many exotic species to the verge of extinction in their native lands. Endangered wildlife is a major concern of conservation and environmental protection groups.

So, if you want to learn more about wild animals, visit your local library or zoo, or better yet, spend a vacation in a state or national park where you can observe wildlife in its natural environment. And don't contribute to the extermination of exotic animals in their home lands.

—by Bob Wingard



**DICK DIETZ USES BENCHREST** to make zeroing-in of his M700 Remington 25-06 easy. This is a fine varmint/big game load.

*To the 250-3000 Savage and 25-06 We Say . . .*

## ***Welcome Back, Old Friends***

**By Don Lewis**

*Photos by Helen Lewis*

**I** CAN REMEMBER as if it were yesterday the first time I fired the famous Savage 250-3000. The year is unimportant, but I do recall I was rolling a hoop rather expertly along a dusty dirt road. I was about 10 years old and hoop rolling was quite an art with the young boys in my community. I could do most anything with the eight-inch steel band taken from the hub of a wooden wagon wheel, from starting it with the hoop stick to writing my initials in the middle of the road.

This particular day an ear-splitting rifle crack put an end to the hoop rolling, and in less than a minute I was in the middle of a group of fellows who were trying out a new rifle. A brand-

new rifle in those days wasn't a common sight, and I was all eyes trying to get a good look at it. I never dreamed of being asked to shoot it; that was just for the veteran hunters of the group. I became more curious when I heard it whispered that the rifle had cost \$80. That was an unbelievable sum in those days, but I found out later that the Model 99K did cost that much even in the early '30s.

A few more shots were fired by selected individuals while the air was filled with incredible statements—such as the bullet rose above the bore for the first hundred yards due to the extremely high velocity, and that just a blade of grass would cause the bul-



let to disintegrate into a thousand pieces. I stood spellbound, watching the older men shoot and believing every word. The awesome muzzle blast kept me transfixed.

Jealousy and sheer envy filled me when another kid was offered a shot. All the talk of the 250's speed unnerved the boy, and he took the rifle and fired it so quickly that he missed the can by three feet. A lot of razzing went on over the kid's fear of the rifle, and I was enjoying every bit of it, adding an occasional sarcastic comment of my own. My enjoyment of the other boy's humiliation was short-lived; the rifle was suddenly shoved into my hands. I was really on the spot and scared to pieces. I was afraid of the recoil, the muzzle blast, and the entire rifle, and I knew if I missed I would receive the same lampooning suffered by the other boy. You can imagine my mental state.

I watched with apprehension as the powerful looking cartridge was fed into the chamber and the safety locked into the operating lever.

"It's all yours," the fellow loading the rifle said sarcastically. "Let's see how far you can miss, and don't worry, you can stand a bloody nose."

Laughter went up from the group, and I found myself holding a brand-new rifle I was afraid to shoot in front of a group of local experts. I wished I had kept on rolling the hoop, but there was no backing down now. I had two alternatives: I could do what the other boy had done or I could act unconcerned and attempt to hit the small can 60 yards away. At the tender age of 10, I fell victim to fear and raised the rifle and jerked hard on the trigger.



"Take the safe off, dumbbell," a voice yelled.

"He's scared of it," another voice echoed.

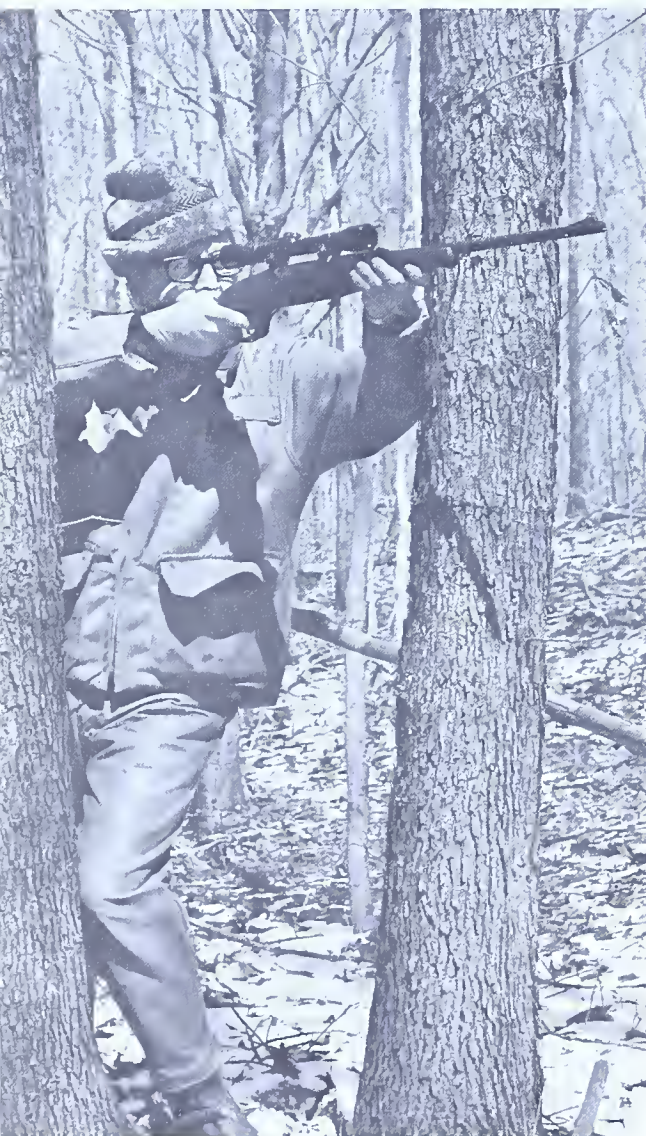
I lowered the rifle, and looked squarely at my tormentors. "I know what I'm doing. I was just getting the feel of it," I said, with a surprising degree of calmness. Actually, the guy who said I was afraid of it had hit it square on the nose, because I was still shaking at the knees. But my answer seemed to make sense and no one had noticed the terrific yank I had given the trigger. The moment of silence that followed seemed to bolster me as I pulled back the safety, raised the rifle and fired. My aim was not long, but I did manage to pull just as the sights crossed the can. For an instant the can was motionless and then it seemed to explode. It was the most beautiful sight I had ever seen. I handed the rifle to its owner as a couple of the fellows slapped my back, and I wasn't long in gathering up my hoop and heading for home. I suppose my imagination is playing tricks on me, but it seems now that I took 10-foot steps for the first mile. As I said earlier, I've never forgotten that shot.

### Heated Arguments

There is no question that the Savage 250-3000 cartridge caused more heated arguments around the "hot stove" league than any other shell. It must be remembered that during those years ballistics weren't as widely published as now and handloading was unheard of in my area. In fact, I never heard of any hunter firing groups when I was young, simply because excessive shooting was restricted due to the shortage of money. All discussion was based on actual hunting experience or just what each fellow thought about a particular cartridge. While writing this article, I have fired several hundred rounds in chronographing and benchrest tests, but 35 years ago, that many shells would

have lasted a hunter a dozen years or more.

I don't want to be critical, but I honestly feel that some of the gun writers during those years promoted just what they liked and condemned what didn't suit their fancy. Perhaps the writers of that era did know more than most of their readers and had access to data that the reading public would never see, but I feel they didn't always attempt to present the facts.



**NEW SAVAGE M99A in 250-3000 caliber brings back a great combination for everything from woodchucks to white-tailed deer. Its recoil is light, its accuracy excellent.**

The same situation does not exist today. The modern hunter and shooter is not only very knowledgeable but also often has plenty of equipment, money, and actual hunting experience to evaluate the qualities of a rifle.

Some of the myths that were circulated about the 250-3000 stemmed from gun writers who opposed the small, fast cartridge, the old-time hunter's belief that bore size represented killing power, and the fact that varmint hunting was not popular then and big game hunting was done in heavy brush at short ranges.

The real truth is that the 250-3000 has been a good cartridge ever since the day in 1915 when Savage introduced it. I've explained in other columns how velocity was the paramount goal shortly after the turn of the century, and a great amount of emphasis was put on it. One cartridge was considered better than another if it had a muzzle velocity 100 feet per second faster than the first, and every manufacturer was doing his utmost to come up with burning speed.

#### **Newton and Donaldson**

I can't see much point in going back in the 250-3000's history, but from what I can gather, the late Charles Newton designed the original 250 on a Krag case. Later, Harvey Donaldson suggested to Savage the 30-06 case be shortened. Apparently, Savage liked the latter suggestion and introduced the 250-3000 in 1914 or 1915. Since speed was the factor then, Savage stuck with the light 87-gr. bullet to obtain the then "impossible" 3000 fps which gave the 250 its final name—250-3000. Savage stayed with the lighter bullet until the middle 1930s when a 100-gr. bullet was introduced.

The 250-3000 never gained great popularity in Pennsylvania as a deer cartridge, due to the rugged terrain and the type of hunting popular then. In fact, even the Winchester 270 was considered too light and fast by many veteran Pennsylvania hunters during



Depression days. The top cartridges of that day were the 30-30, 35 Remington, 32 Special and the '06. I can still remember the shaking of heads around the potbellied stove in Aunt Cass's grocery store when the experts of the community discussed the fact that a fellow was plumb foolish to spend \$80 for a rifle that wasn't fit for anything. The lack of chuck and varmint hunting allowed this type of thinking to dominate, and it did do real damage to the 250-3000 and later the excellent 257 Roberts. However, it was more the lack of ballistic knowledge than the fact that led to these beliefs.

There's no question the 87-gr. bullet was too light for most deer hunting, but the 100- and 120-gr. slugs of today need not take a back seat. The 6mm advocates look disdainfully at Savage for bringing back the wonderful 250, but properly loaded the 100-gr. 250-3000 bullet has a higher muzzle velocity than the 105-gr. 243 bullet. This is not conclusive proof that the 250-3000's bullet is better, but it does show it is not inferior to the 6mm's, as many shooters think.

When I removed the new Model 99A Savage from its box, it was almost like unwrapping a bit of history and reliving a part of my past. I don't want to sound dramatic, but for an instant, I stood barefooted and scared, holding the speedster that broke the 3000 fps barrier. It was a moment I will remember. Later, I scoped the 99A with the beautiful Weaver 700 Classic, and I couldn't have chosen a better scope for the lightweight 250-3000.

I do have a few personal regrets over some design features of the new 99A. For instance: I wish Savage had offered it in a takedown model, retained the safety on the bottom of the receiver, and made the rotary shell carrier from brass. I know these are just my own whims, and, in all fairness I must admit the safety is better for both left- and right-handed shoot-

### Letters . . .

*Shooters for some reason—perhaps because they're involved in an interesting subject—tend to be letter writers. Many of them write to gun columnists, either requesting information, giving it, or just because they want to talk about their pet guns. I enjoy such correspondence and answer as much of it as possible. But sometimes there just isn't enough time to reply to all mail. If you didn't get an answer to a letter, this is the reason.—D.L.*

ers, positioned on the receiver's tang.

The 99A is just over 40" in length, weighs a bit over six pounds, and has the straight-line saddle stock with the old schnabel fore-end. The 99A would be ideal for the hunter who appreciates the lighter calibers in an easy-to-carry rifle. Also, there could be no better choice for the lady hunter than the 250-3000. I'm certain that most women hunters are not interested in tramping through the heavy brush, and the 250 Savage would be the perfect choice for the wide open rights-of-way and open country. With practically no recoil, the 250-3000 can be scoped without fear of being the victim of excessive recoil.

### Reintroduced by Demand

Savage had discontinued the 250-3000 in the 1960s, but several years ago when I visited the factory John Marsman, their sales manager, told me they were thinking of reintroducing it. I asked why, when several 6mm cartridges—notably the 243 Winchester, 6mm Remington and 240 Weatherby—were readily available. John said that a large number of varmint, deer, and antelope hunters had not found what they were looking for in these other cartridges and had been asking Savage to bring back the 250-3000. There can't be any better reason for a factory to bring back a good cartridge, especially when they bring it back in



**25-06 REMINGTON**, here carrying a Redfield 4-12X scope, is deadly on 'chucks at long range. Its loud report makes it more suitable for sparsely settled areas than suburbs.

the same model it originally appeared in. I fully expect this old favorite is going to find many friends among today's shooters. And it deserves the welcome.

Another friend from years past, that has finally been given new life, this one by Remington, is the 25-06. This cartridge stems from the old 25 Niedner. I suspect this is one of the oldest wildcats. History tells us A. O. Neidner offered rifles for the 25-06 cartridge around 1920, and he probably hit upon the idea some years before. The 25-06 was probably the easiest wildcat cartridge to make, because it is simply the 30-06 necked down to 25 caliber, retaining the 30-06's original 17 degree 30 minute shoulder angle.

Other than the 22-250 or the 219 Donaldson Wasp, I have made more 25-06 cases than all the rest of the wildcats put together. My normal procedure included running the '06 case into a 25-06 trim die and filing off the excess brass that protruded through the die. This gave the case the proper length and all that was required to complete the case was to run it into a 25-06 full length sizing die.

I can't recall when I fired my first

25-06, but I do know the first one I owned was an "Improved" version. When I acquired the rifle, the 25-06 was still a true wildcat, and my Improved job had the chamber shoulder angle cut sharper. Blowing out the conventional 25-06 case to the sharper angle permitted a few more grains of powder. Just for the sake of comparison, the standard 25-06 case will hold 62 grains of 4831 and my Improved case will take 65 grains. The maximum load I used was 61 grains of 4831 behind a 75-gr. hollow point bullet. After shooting a number of regular 25-06s, I can see no benefit in the Improved version.

We owe a debt of gratitude to Remington for giving legitimate status to two excellent wildcats, the 22-250 and the 25-06 Remington. There have always been a number of wildcat cartridges around. Many served no real purpose and were merely curiosity items. A number were basically sound, as Dick Dietz of Remington explained to me, and had merit as commercial rounds because they filled a certain gap in bore size or were better ballistically than existing factory rounds. Dick went on to say that the 25-06 Remington was introduced commercially because it offered a somewhat more powerful combination varmint and medium-game cartridge than, say, the 6mm's.

#### **Fine Varmint Outfit**

Remington feels its decision to offer it with the 87-gr. "Power-Lokt" bullet, giving it the tight grouping, accuracy and flat trajectory that the varmint hunter needs, makes the 25-06 Remington an exceptional varmint outfit.

Remington now offers the 120-gr. pointed soft point bullet of "Core-Lokt" construction. Ballistics of this loading will make it ideal for short to long range hunting of all but the largest North American big game. It appears that in the 25-06 hunters of both varmints and medium-size game have one of the most effective all-around



# Velocity Tests of 250-3000 Savage and 25-06 Remington

## Avtron K233 Chronograph

Caliber	Rifle	Case	Primer	Load	Bullet	Velocity	Variation
250-3000	M99A 20"	Rem.	Rem. 9½	39/4895*	87 gr. Sierra	3391	68
250-3000	M99A 20"	Rem.	Rem. 9½	35/4895	117 gr. Sierra	2903	50
250-3000	M99A 20"	Rem.	Rem. 9½	35/4895	75 gr. Sierra	3093	67
250-3000	M99A 20"	Rem.	Rem. 9½	37/4895	75 gr. Sierra	3329	33
250-3000	M99A 20"	Rem.	Rem. 9½	33/4895	117 gr. Sierra	2777	35
25-06	Custom 26"	Remington factory load			87 gr.	3407	82
25-06	Custom 26"	?	Rem. 9½	58/4831	75 gr. Sierra	3683	84
25-06	M700 24"	LC64NM	Rem. 9½M	60/4831	75 gr. Hornady	3615	103
25-06	M700 24"	FA60 Match	Rem. 9½M	60/4831	87 gr. Speer	3526	65
25-06	M700 24"	FA60 Match	Rem. 9½M	58/780BR	100 gr. Speer	3378	91
25-06	M700 24"	WV	Rem. 9½M	58/780BR	100 gr. RCBS	3421	47
25-06	M700 24"	FA60 Match	Rem. 9½M	58/780BR	100 gr. Nosler	3431	83
25-06	M700 24"	Rem.	Rem. 9½M	58½/4831	100 gr. Hornady	3422	26

NOTES: Velocities listed are instrumentals, taken at 15', average of 5 shots. Variations are extremes in velocities over 5 shots. Except for the listed factory load, 25-06 cases were formed from 30-06 brass, once fired before chronographing. Case capacities are not identical in the different makes. Averages, taken to the mouth with ball powder, are as follows: RP-66.9 gr.; LC-67.4 gr.; WV-70.5 gr.; FA-71.1 gr. *The foregoing amounts are NOT loads, but simply case capacities.* They indicate that a maximum load in the FA case, for instance, could well be too hot in the RP case, which has a total capacity significantly smaller.

Temperature at time of chronographing was about 90 degrees. \*High pressure; approach with caution.

cartridges that can be manufactured.

I did all of my 250-3000 shooting with the Savage 99A. With factory fodder of several brands, groups ran  $1\frac{1}{4}$  to  $1\frac{1}{2}$  inches at 100 yards using 100-gr. bullets. I fired several groups with hand loads that slid just below an inch with 35 grains of 4895 behind the 100-gr. Sierra spitzer bullet. Severe winds and inclement weather hampered me, but I reached the conclusion that tailored handloads could make the 99A a very effective varmint outfit.

As I stated earlier, I had fired the 25-06 for years in many wildcat versions and chamberings. I have also explained many times how well the Remington Model 700 with its fine adjustable trigger will group. Using a Model 700 chambered for the 25-06 Remington, I had no trouble in cutting groups with all weights of bullets that seldom went above  $1\frac{1}{4}$ ". I recall with my one 25-06 Improved with hot loads, I had trouble keeping under  $1\frac{1}{2}$ ".

Interarms of Alexandria, Va., sent me one of their 25-06s built on the Mauser action. The Mark X model I received showed signs of good workmanship, especially on the stock. So many times on these converted outfits, the inletting and floorplate fitting are shoddy jobs. I like this model because

it is plain and carries the looks of a good hunting rifle. The checkering is sharp and the rifle has balance that makes it easy to swing.

I scoped the Mark X with a Redfield 4-12X with Leupold mounts and ran about 100 rounds through it in chronographing and bench shooting. I wasn't impressed with the military type trigger, but it's suitable for big game hunting, and the varmint specialist can install an adjustable trigger with ease on the Mauser action.

All in all, I enjoyed testing and shooting these two favorite cartridges of the past and am glad they have been finally recognized for their real worth. The 25-06 is already available in a number of makes and models, and it looks as if its future is secure. If the 250-3000 always remains in the 99A model, it will be fine with me, although I suspect it will receive the same attention that the 25-06 and the 22-250 have.

In a day when Magnums are dominating the scene, it's assuring to know these two old-timers of the medium power category were brought back by popular demand. This could be indicative we are reevaluating our hunting methods and may get back to putting the emphasis on good shooting instead of sheer power.

## Looking Backward . . .

"There was a natural deer-lick near the mouth of Sartwell Creek about 30 rods from my corner, where I went whenever I wanted a deer. I wouldn't have to wait but a little while to get one, as a rule. I made a blind beside a hemlock tree from which I watched. One time when I was waiting in the blind, a piece of moss fell down close to where I sat. After a few minutes another piece fell. When I looked up, there on a limb lay a large panther watching me; evidently we were both looking for venison. I had no trouble killing him after which I made my blind in the forks of a tree."

Victor L. Beebe, "History of Potter County, Pennsylvania," p. 35, published by the Potter County Historical Society, Coudersport, 1934.



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### COVER PAINTING BY CLARK BRONSON

The Great Blue Heron is not plentiful in Pennsylvania, and yet it is seen occasionally by outdoors people as they pass along our streams or ponds. A large, stately bird, it prowls the edges of our small waterways, pausing for long periods to stand motionless and watch for a passing tidbit. This big bird eats almost anything it can grab with its powerful beak—crayfish, small snakes, tadpoles, salamanders, frogs, fish or whatever. It even captures meadow mice and shrews in marshes. It is a wary creature and often rises before anyone realizes it is nearby, its long neck bent gracefully, long legs extended straight back. Seeing this magnificent bird can be the highlight of a day's outing for any sportsman.

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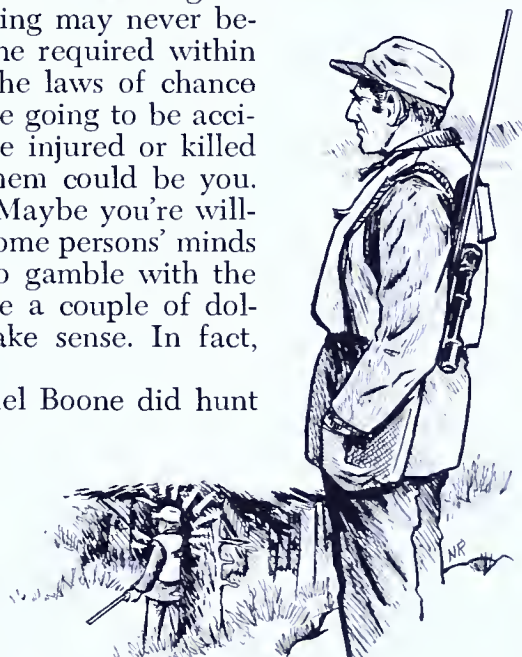
## Think Orange!

**A** GAIN IN 1971, as in 1970, no Pennsylvania hunter wearing fluorescent orange was shot in mistake for game or because he was not seen by another hunter. In fact, no one in this state has ever been shot for these reasons while wearing fluorescent orange. This is significant—something that should be considered seriously by everyone who hunts. As John Behel's summary of last year's hunting accidents shows (see the June issue's Hunter Safety column), some accidents occur in all kinds of hunting seasons and are inflicted by all kinds of arms—rifles, shotguns, handguns and bows and arrows. They happen in all age groups, in all kinds of cover, and for many different reasons. There is no defense against some casualty causes—a stray shot, for instance. But you can defend yourself against many dangers simply by making certain you are highly visible. That's where fluorescent orange hats and vests come in. They're eye-catching . . . they're conspicuous against any background . . . they don't look like anything that anyone is thinking of shooting. In other words, they're lifesavers.

Last year Pennsylvania hunters compiled their best safety record since 1963, despite a great increase in hunters in the intervening years. This doubtless was due to our required Hunter Safety training for new hunters under age 16 and the growing use of fluorescent orange. But the fact remains that not enough hunters are wearing orange and some are being injured or killed because they're not.

I have had letters from hunters who say they don't wear fluorescent orange yet but they will as soon as it becomes mandatory. I don't know how to interpret such reasoning. Obviously, if a law requires such items they will either wear them or quit hunting. But why insist on waiting for the legislators? Fluorescent orange clothing may never become legally required. Or it may become required within the next few years. But meanwhile, if the laws of chance continue, a certain number of hunters are going to be accidentally shot—hunters who would not be injured or killed if they were wearing orange. One of them could be you. Or a son or father or wife or daughter. Maybe you're willing to take chances with your own life—some persons' minds just work that way—but do you want to gamble with the life of someone in your family? To save a couple of dollars? Why take the risk? It doesn't make sense. In fact, it's absolutely stupid.

So let's get with it, huh? Maybe Daniel Boone did hunt deer while wearing fringed buckskins and a coonskin cap, but he's been dead over 150 years. Conditions have changed and we have to change with them. If you insist on being the last holdout against fluorescent orange in your gang, you just might not make it through the season.—*Bob Bell*







*European Hunting Is Not Only Different  
Than You'd Think, but Also Better . . .*

# Hunting in the Old World

By Sherwood S. Stutz

THE TREE PLATFORM creaked a little as I hunched further into my heavy jacket. The land to my front looked like a painting. From the woods to the right, left, and rear an open field stretched like a small bay some 300 yards to where a road crossed the rolling farmland. In the gathering dusk, smoke drifted from a small fire near the road. A tractor pulled a wagon to the road and roared away. The German farmers put out the fire and trudged slowly toward the distant village. Their voices rang clearly in the misty twilight as they passed over the hill and out of sight. Even before they were gone I felt the jaeger's hand on my arm and turned slowly and carefully to look. Below and to our right stood three roe deer, a spike buck and two does. The jaeger shook his head at me. I let my rifle lie and just watched as the small, graceful animals stepped into the field and began to feed. By now it was very nearly dark.

Slowly, so as not to startle the nearby deer, I raised my binoculars and began a slow, careful sweep of the woodline to my left. Movement caught my eye and by glasses picked up another group of *reh* at about 150 yards. The jaeger examined this group with his much larger glasses, then nudged me. The second deer from the right was mine.

Gently I lowered my binoculars and quietly brought my rifle up and steadied it against the platform guard rail. As I centered the deer in the scope, the click of the safety sounded like a clanging hammer to my imagination. My target turned broadside to me

and dropped its head to pull at something on the ground. Holding my breath, I squeezed the trigger.

In the quiet evening the shot sounded like a clap of thunder. The field was suddenly empty. The jaeger smiled, said "*Gute genug!*" and swung out of the platform and down the tree. I climbed stiffly and slowly after him and followed along the edge of the field. He stopped to cut two evergreen twigs and carried them to the deer. One he put into the deer's mouth. This was the "last bite" of German hunting tradition. The other twig he dipped into the animal's blood and handed to me draped across his knife blade. I carefully stuck the "hunter's branch" in my hatband. The jaeger was pleased. He'd selected the right deer. I'd made a clean kill. The hunt was a success.

## Traditions Flourishing

We Americans often find it difficult to believe that hunting can flourish in densely populated, heavily industrialized modern Europe. We tend to believe that the New World offers open spaces and amounts of game that our overseas cousins can't match. We've been wrong. Europe's hunting traditions appear in prehistoric paintings on the walls of caves. The traditions are alive and flourishing today.

Some species hunted by our ancient relatives are gone forever. However, the wild reindeer is still found in far northern regions; the brown bear still roams the Carpathian Mountains; the bison lingers in Poland, and moose (the "elk" of Europe) are still important game in Scandinavia. In the years since V.E. Day, many Americans have



**HUNTING FROM A tree stand is discouraged in Pennsylvania, because of the safety problems connected with this method, but the practice has long been common in Germany. Hunters there must pass a difficult examination before they qualify for a license, and this may make them safer in all their actions.**

been surprised by the variety of game that may be hunted in West Germany during the appropriate open seasons. In Germany, the list of legal game includes four species of deer, chamois, mouflon, boar, and a wide variety of small game, furbearers, upland game birds, and waterfowl.

Hunting in Europe is not the right of anyone who can obtain a hunting license. Hunting is a privilege pertaining to those who own hunting rights. Wildlife on the land belongs to the owner of the land. Game is considered valuable property and poaching is a serious offense, so serious that in Ger-

many, I was told, a game manager or jaeger may legally shoot a poacher caught armed.

German game management methods are generally typical of western and central Europe. No one may exercise hunting rights on less than 200 acres, even if he owns the property. Owners may, however, jointly rent out the hunting rights on their adjoining small properties and permit the formation of legal size hunting preserves or "reviers." Some hunting is available on government-owned forest lands, but this is managed in the same fashion as private property. Under German law, the right to hunt includes the duty to maintain the largest game populations that can be sustained without undue damage to farms and forest.

#### **Management Plan**

Ordinarily, the owner or renter of a revier hires a full-time professional gamekeeper called a jaeger—German for "hunter." Annually, the owner must submit to the regional government a management plan in which he outlines his methods of maintaining the stock level, and the number of each class of game he intends to harvest during the year. This includes his plans to maintain or improve game quality by protecting superior breeding stock. Once the plan is approved, the revier holder is obligated to fulfill its requirements.

Possession of hunting rights does not authorize hunting without a license. Hunting licenses are not easily obtained. The candidate for a license must pass a stiff examination after taking a comprehensive course in hunter methods, game characteristics, hunting traditions, and safety. The test is usually administered after 30 lessons. Although hunting accidents are almost unheard of in Germany, a hunting license is not issued without proof of liability insurance. In the 1950s, hunter's insurance cost about \$20 per year.

The excellent accident record of the



German hunter is probably due to training, custom, and the comparatively small number of hunters. An odd note to Americans is the wearing of a shirt and necktie under the jacket while hunting. So high is the prestige of hunting, and of hunters, that hunting clothing has become the basic national costume in Bavaria, the Tyrol, and in Austria.

Near the village of Hohenfels in eastern Bavaria, close to the Czechoslovakian border, was a veritable hunter's paradise. A huge area of rolling farm and woodlands had been converted into a military maneuver area in the 1930s. Since 1945, this had been an American training ground. After lying fallow for 25 years, the overgrown fields and pastures were being encroached upon by brush and trees, and the abandoned farm buildings were beginning to crumble. Here the populations of roe deer, hare, pheasant, and partridge were particularly dense. Here, too, the available food and cover made for an unusually large and productive population of wild boar.

One July evening a friend arranged with the local Forstmeister (forest supervisor) and a young jaeger to take me out on Hohenfels Training Area for my first boar hunt. It proved to be

one of my most interesting hunting experiences in Europe. We met the German hunters at an inn or gasthouse in the late afternoon. The German hunters discussed the hunting area with us and then informed me that as the novice boar hunter, I would have the first shot. After a short lecture on the necessity of a clean kill and the ferocity of a wounded boar, we departed for the hunting area in an open truck. In the field, we dismounted and hunted on foot.

### Uprooted Dirt

The Forstmeister showed me freshly uprooted dirt in the old fields as we moved slowly through the area. It began to get dark, but he showed no concern. Roe deer, hare, and pheasant were seen frequently. Reflecting back on the progress of that hunt, I'm convinced that the old jaeger knew exactly where we were going to find boar, and when. Just before dark he led the way back to the truck, drove a couple of miles, and had us dismount. As he led us down a lane and across an abandoned pasture, he showed more and more caution. Near the top of a small open rise, the Forstmeister motioned me to join him. Standing at his side, I listened carefully to the faint rustling noises coming from the far side of the crest.

The Forstmeister placed me on the left flank of the rise, and crouched beside me. The other two hunters moved around to the right. Suddenly a snort from behind the knoll was followed by movement. Through my rifle scope, I watched a large sow lead five spotted piglets rapidly to the left. Then a much larger pig, moving fast, appeared. The old Forstmeister said "Shoot!" I'd been watching the pig through the scope. I squeezed off the shot. The dark form ran a few more steps and collapsed. I worked a new cartridge into the chamber and slipped on the safety.

The jaeger went back for the truck. In a few minutes I stood over my

### About the Author

*Sherwood S. Stutz is Assistant Professor of Wildlife Technology at the Dubois Campus of Pennsylvania State University. The accompanying article is based on his personal experiences and training. He writes: "The Europeans have demonstrated that hunting and maintenance of large populations of game species can be compatible with highly industrialized economies and very dense human populations. I don't suggest that we discard our traditions and adopt the European way. But there are things about European game management that should be better known here." We believe you will find his article highly interesting.—Ed.*



**LEGAL GAME IN West Germany** includes four species of deer (roe buck above), chamois, mouflon, boar, small game, furbearers, upland game birds and waterfowl.

prize and examined it in the glare of the headlights. My first European wild boar was probably the ugliest beast I'd ever hunted. With its long, snouted head and thick coat of wiry, sooty-brown hair, it resembled nothing so much as a huge, overgrown rat. A brief examination revealed that the tusks were too small to be of interest. The German hunters estimated its weight at about 250 pounds and asked me if I wanted to buy the meat at 2½ Deutsche Marks per kilo. I was quite enthusiastic until I found they wanted me to buy it *all*. When I regretfully declined, they told me it was no problem. The Forest Office would dispose of the meat profitably. We field-dressed the pig, lifted it into the truck, and went back to the gasthouse. I was sorry later that I didn't speak German. Over supper, it became obvious that the hunt was gaining in detail and excitement each time it was described.

The offer to sell me the meat deserves explanation. Game is considered

an economic resource in Germany, and may be purchased over the counter in butcher shops. It appears that so long as the owner takes his game legally, he may dispose of it as he sees fit. Germans have reminded me that the cost of maintaining a revier, paying one or more jaegers, habitat improvement, and winter feeding is quite high. The sale of game is often the revier holder's only method of breaking even. This has become a part of hunting custom and tradition. If you hunt, you are entitled to the trophy, only, from the game you shoot. If you want the meat, you are expected to buy it from the owner at the prevailing rates.

#### **Gasthouse Near Schwabach**

One rainy morning, I drove up to a gasthouse near Schwabach in Bavaria, and joined about 20 German and a half dozen American hunters for a small game drive hunt. The hunt leader greeted each hunter personally. When all had arrived, he gathered the hunters and beaters together and announced the rules for the hunt. We were to take hare, pheasant, and fox. We were not to take deer or partridge. After the briefing, we filed off to the edge of a nearby wood and were carefully placed by the leader. I looked down the line, and could plainly see the man on my right and left. We waved to each other, and settled down to study our designated fields of fire.

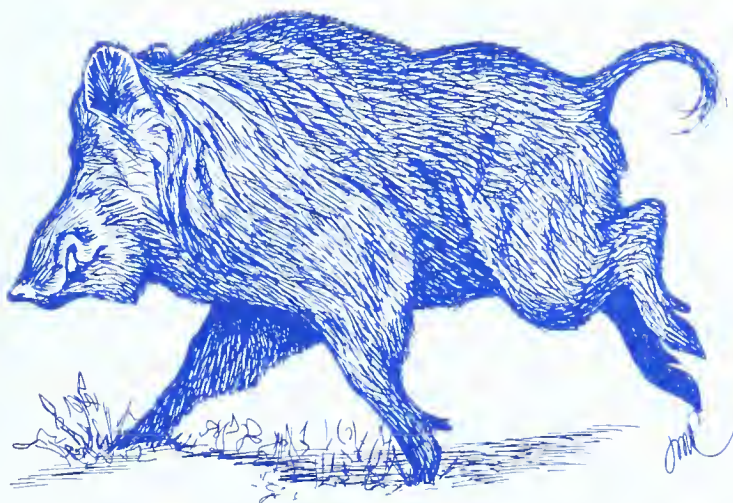
After a short wait, a bugle called through the rain from one end of the line. This was the signal for the beaters to move out and for the hunters to load. I slipped two shells into my shotgun and peered into the wet woods. Soon shots were heard along the line. I didn't see a thing until the beaters came up through the trees, talking, singing, ringing cowbells, striking the trees with sticks. Then I unloaded and joined the other hunters at the corner of the woods. So it went all day. We would set up in a new location and



wait, the bugle would sound, and the beaters would move on through, pushing the game ahead of them. No one got many shots that day, but every hunter did get a chance at some game. After the last drive, we gathered in front of the gasthouse while the beaters pushed a wagon loaded with the day's take up to the yard. While the shooters stood quietly in front of the inn, the game was laid out in rows. Twenty-two big European hare were laid out in order, the best first. Thirty-one ring-necked pheasants were displayed after the hares. The three foxes were considered vermin. When the leader was satisfied with the display arrangement, the beaters stepped back. The hunt leader made a short speech, thanking all for their help and sportsmanship. Three young buglers stepped forward and played a final salute to the game. Then the German hunters rushed to the display and grabbed hares and pheasants. The hunt leader produced a scale, and each hunter weighed and paid for the game he wanted. The formalities and

business disposed of, the entire group trooped into the gasthouse for a hot meal and the tales of this and other hunts began to grow and gather wondrous detail, as they do anywhere in the world where hunters gather.

The American tradition of free hunting for all has suffered from increasing restrictions during the 19th and 20th centuries. Bag limits, season limitations, licensing, and the posting of private lands have created a hunting climate that is beginning to resemble the conditions under which Europeans hunt. Ours is a very different tradition based on a different legal framework and a 350-year separation from the developments in Europe. No one should expect Americans to accept European methods without critical analysis and great modification, but there is much about Old World ways that could be carefully reviewed here. Game in Europe is a valuable renewable resource treated as a crop to be fully harvested on a sustained yield basis and used without waste. Are there lessons here for us?





**THE SURVIVAL TRAINING TAUGHT by Don Kepler during World War II was instrumental in saving the lives of many downed Navy fliers.**

# SURVIVAL!

By Don Kepler

**E**ARLY IN World War II, the U. S. Navy discovered that 75 percent of all its pilots shot or forced down came down alive, and yet, out of that group, barely five percent survived. The Navy researched the background of this five percent to find out why they lived when so many died and discovered that practically every survivor was an experienced outdoorsman, a man with a background in hunting, fishing, or camping. The Navy immediately set up a survival training program and taught every pilot how to live off the land and sea. It was my fortune to be one of three officers selected to set up this program and carry it out. The

other two were the famous Craighead brothers.

Before telling you something about how to survive, let me describe two actual experiences that happened during the war. They will show the value of this information.

The first is about a Navy pilot who grew up in this country and had the advantage of all the education we have to offer. After high school his parents sent him to a good prep school, and when he finished there, they sent him on to one of our leading universities. Four years later he was graduated with honors and the Navy picked him up and trained him two more years at a cost of



\$40,000 for flight training. Yet he went out one day and lost his life simply because he had never received any instruction in survival.

This young man took off one day from San Diego on a routine test flight and never came back. He just disappeared. An intensive air search lasted 10 days. Not a trace of him was found. The commandant notified the pilot's parents that everything possible had been done, and they would have to consider their son missing.

A few days later the commandant got a letter from the young man's father, thanking him for everything he had done. But the father had a request to make. He said his wife had dreamed their son was 400 miles due southeast of San Diego—the opposite direction of his test flight. He wanted to know if the commandant would send a plane to look over this area so that his wife would be satisfied. Two planes were sent. Four hundred miles southeast of San Diego they discovered the missing plane. The pilot evidently had made a 180-degree error in his bearing, ran out of gas and had to ditch his plane along the Gulf of California.

There was a place where the two rescue planes could land near the downed plane. They searched but couldn't find the pilot and finally decided to send back for bloodhounds to assist in tracking him down. The pilot had left two notes in the cockpit of his plane, one to his best girl, the other to his mother. The one to his mother started off:

"Dear Mom: I don't think I'm gonna

*Don Kepler, an associate professor in physical education at Penn State, is one of the country's foremost authorities on survival techniques. His interest dates back to pre-WWII days and, as a Lieutenant Commander in the Navy during that war, his training was instrumental in saving the lives of many downed fliers. Among the many groups which have benefitted from his experience are the first Peace Corps trainees, the youngsters taking part in the Conservation Camp program sponsored by the Pennsylvania Federation of Sportsmen's Clubs, and students in Penn State's outdoor recreation programs. The accompanying article is based on Mr. Kepler's opening lecture to each class studying survival training.*

make it. With the whole ocean in front of me, I'm slowly dying of thirst. . . ."

When planes returned with the bloodhounds, they soon found his remains. He obviously had searched for water and food, never found either, then lain down and died. Vultures picked his bones clean.

This fellow did not need to die. Right where his plane was located he had enough water and food to survive indefinitely. Remember this—you can get all the fresh drinking water you want along a beach if you simply go back about 50 to 75 feet from the shore line, walk parallel to it until you come to a low spot, and dig what we call a beach well. Using your hands you can scoop a hole in the sand about three feet deep, and in a few minutes it will fill up with good fresh water. This is possible because the rains soak down into the sand and are held underneath the surface by suspension. This water seeps into the low spots in the beaches to form underground pools. Actually, at any place along this 50 to 75 foot line you can dig and get water, but in the low spots you won't have to dig as far and more water is available faster.

### Beach Well

The search party dug a beach well under the wing of the pilot's plane and in less than two minutes it filled up with fresh water, and of course that would have solved his main problem. For food all he would have needed to do was wade ankle deep into the surf. In most surfs, shell fish are so plentiful you can pick them up with your hands. Anything you get from the ocean you can safely eat raw, but you have to cook anything you get out of fresh water. Parasites can live in fresh water but not in salt water, and if you eat fresh water fish raw you get these parasites into your bloodstream where they can cause severe illness or even death.

Now this pilot had had everything that he needed to stay alive right at his fingertips, but no one had ever told him how to find these necessities and he died.

The other story is the exact opposite. It's about a fellow who was never in school a day of his life, and yet he holds the world's record for sea survival and it's doubtful that anyone will ever break it. The boy, a Chinaman by the name of Poon Lin, was a steward aboard a British tanker early in the war. One day in the South Atlantic a German submarine torpedoed the tanker. In a matter of minutes the ship went down with all hands except Poon Lin. By some miracle he



**THE FAMOUS** Craighead brothers and Kepler show how to cut a jungle vine to obtain water. This source is available throughout the tropics of the world.

was blown clear. A raft from the tanker—just a wooden platform with an empty oil drum under each end—came floating by and Poon Lin climbed aboard. By using just one little outdoor technique, he was able to survive on the ocean for 133 days—4½ months!—and was in excellent condition when rescued.

I questioned Poon Lin to see how he did this so we could pass the information on to others in survival training. He said the first thing he did when he got aboard the raft was take an inventory of survival equipment. On his person he had a little flashlight and a pocketknife, and on the raft was a square piece of canvas, a short piece of rope, and a gallon water keg. The keg was empty.

Poon Lin said the thing that saved his life was the fact that as a little boy in China he liked to fish, but he was so poor he couldn't buy a line or a hook. So, like the other poor kids, he learned how to make his own. By stripping down the inner bark of certain trees or plant fibers he made lines and improvised hooks.

Poon Lin decided the short piece of heavy rope would provide the best material for a fish line. By separating the individual fibers he was able to make a line. For a hook he cut a piece of wood from the raft and whittled a gorge or toggle hook. This hook is a simple but highly effective design used by natives all over the world. It's

nothing more than a little piece of wood or metal sharpened on both ends like a pencil. You cut a little groove slightly off-center to fasten the line so it won't slide off. The bait is cut into long thin pieces and the gorge hook is shoved into it lengthwise. When the fish swallows the bait, a pull on the line flips the hook crosswise and it can't be pulled out without bringing the fish with it. Poon Lin told me he never lost a fish once it swallowed the gorge hook.

Now he had the line and the hook but he had no bait. This really had him baffled. He thought about the problem all day and he never did solve it, but that night it was solved accidentally. During the night he flashed his light across the water and it attracted some little flying fish. They came right up and sailed along with the ray of light. That gave him an idea. He held the light over the edge of the raft and used it as a lure to bring in a flying fish. At the last moment he turned off the light and the fish hit its head against the side of the raft and fell back into the water, stunned for a few seconds. This gave him time to make a grab for it.

He fished this way quite awhile that night and was so eager that he grabbed too hard and several slipped between his fingers. As a result, he caught only four. He ate two of them right away. At daybreak he cut the other two into long thin pieces of bait, stuck the gorge hook into a piece and tossed this over the edge of the raft. He was in luck right from the start. He was right over a school of fish and about every cast he caught one. He wasn't always that lucky. Sometimes he'd drift for days and never see or catch a fish. Then he'd drift into a school and get one every cast.

### Both Water and Food

These fish provided him with both water and food. He soon discovered that the neural cavity or backbone of the fish was hollow and full of liquid. Removing the backbone carefully, he'd snap it and pour the liquid down his throat. At first he threw the eyes away, but after looking at them awhile reconsidered. They looked so watery he thought he should eat them. And he was right. The eyes of fish contain about 85 percent water. Thus utilized, fish gave him enough liquid to keep going between rains.

There are very few spots in any oceans of the world where it does not rain every 12 or 14 days. When it rained Poon Lin spread his piece of canvas across his lap like a big



cup. When it got full of water he funneled it into the keg. If it looked like a light rain that wasn't going to last long, he took off his clothes and scattered them over the raft. When they were saturated he wrung the water out into the keg. That took care of his water problem the entire time he was out there.

For food he cut fish into thin slices and laid them around the edge of the raft. The sun and wind dried them in 30 or 40 minutes. Once dried and cured they did not spoil. When he could catch no fish, he always had a supply of dried ones to live on.

One hundred and thirty-three days passed. He hadn't seen a ship, a plane, a person. By now he had drifted near the coast of Brazil. That day a Brazilian fishing family—a father, mother, son, and a very young daughter—was starting out. They spied Poon Lin on his raft and picked him up. As an interesting sidelight, the father was so impressed by the amount of fish Poon Lin had caught with his improvised gear that he said the young man would make an ideal son-in-law for a fisherman, and he immediately offered his daughter in marriage!

So you have two examples. One fellow had all the book learning we could give but he knew nothing about the outdoors and he lost his life. Poon Lin never cracked a book in his life but he was an experienced outdoorsman and able to live through a severe test of survival.

Now when you come right down to survival, there are two main things in staying alive—water and food. Water is number one because you can't live much beyond six or seven days without it. Without food, but with water, you can live 30 to 60 or possibly 70 days. This probably surprises a lot of you, but it's been proven many many times. You may remember how, just a few years ago, a girl in Alaska decided to fly with a pilot to San Francisco, where she would take another plane to fly back to visit her family in Brooklyn. They were out over the frozen wilderness when engine trouble forced them down. They survived for 49 days in sub-zero temperature before being sighted and rescued. For the first seven days all they had to eat was a tube of toothpaste and two oranges. The rest of the time—42 days—they lived on nothing but melted snow water.

So you don't worry much about starving to death. Water is the number one problem. But remember—there is scarcely a place on earth where you can't find water if you know how to look for it. Along the beaches

you dig a beach well, at sea collect rain water and, if you can get fish, use the water out of the backbone and eyes. In terrain such as we have here in Pennsylvania, which is the type that covers a great part of the earth, water is no problem. You can't go far in any direction until you run into a stream, lake, river, pond, or spring, and of course it rains often in this part of the country.

Now we come to the jungle. Downed pilots had a lot of trouble in these regions, but I can give you methods of getting water to take you through any jungle of the world. As you all know, jungles are full of vines, but what you might not know is, vines are nothing more than tubes full of water. To get water from a vine, reach as high as you can and cut it off. Then cut it off at the ground. Hold one end up in the air and the water will run out the bottom end in a steady little stream. You can run it right into your mouth and drink, or you can run it into a canteen and collect it. After a little while it will stop. When it does, cut about two feet off the top section and it will start again. Do this until you get down to the last two-foot section and you will get every drop of water out of the vine.

A couple of things should be remembered. The middle of the day, when the sun is bearing down the hottest and you are the thirstiest, is the best time to cut a vine because there is more water in it then. And



**A "METAL MATCH"—derived from the mish-metal of WWII—is a reliable source of fire, one that isn't affected by water.**

if you cut the vine off at the bottom first, you could hold it up forever and never get one drop of water. So remember—top cut first, bottom cut second.

Another method of getting water in the jungle is from a parasite plant called a bromelia. It grows on the limbs of big trees. Its leaves are so formed that they catch rain and dew and hold it. One of these leaves holds about a glass of good water.

Vilhjalmur Stefansson, the great explorer who was my advisor on Arctic problems, called me in after the war and told me to concentrate on survival in that region from now on. He was convinced it would be important to know all we could in the event of fighting there. The far north is nothing but the Arctic Ocean frozen over solid, and getting water can be a problem. Generally, you have to melt ice. As it happens, there are two kinds of ice and only one is good. When ice first forms from the Arctic Ocean, the salt remains in it for about a year. At the end of that time, the salt just leaves it. While the ice retains the salt it will have a dull, cloudy gray appearance. When the salt leaves, the ice turns clear blue and shiny. This is the type of ice you want to melt for water. Melting the wrong ice wastes your fuel and gives nothing but sea water.

You can't drink sea water because it con-

tains about a four percent solution of salt and your kidneys can only pass on a two percent solution. If you drink sea water the kidneys draw the liquid out of the tissues of your body to dilute the four percent down to a two percent solution so they can pass it. You quickly dehydrate yourself and instead of having enough liquid in your body to carry you six or seven days, your time of survival is down to two or three days.

There is one time when you might drink some sea water and it would be good for you if you also had fresh water available. In the tropics or a hot climate where you perspired so much you lost most of the salt in your system and were on the verge of heat exhaustion, a little sea water mixed with your fresh water would be good for you. One part sea water to five parts of fresh water is the recommended ratio.

A desert is the toughest place of all to get water, and yet there are many methods of doing so. Survivors learned early in the war that most deserts have birds which must have water twice a day. They fly to water holes at daybreak and at dusk. By observing the birds' line of flight, a compass bearing can be taken which will lead to a water hole.

Another thing they learned was that a clump of vegetation in the desert was a sure indication of water underneath. And any

**EATING A SNAKE MIGHT NOT APPEAL** to some people, but these Navy fliers, scheduled for the South Pacific, knew that such food could be the difference between surviving and dying.





time you see a barrel type cactus plant that looks just like a beer keg, all you have to do is slice the top off. The inside is full of pulp which is mostly liquid. You can squeeze the liquid from the pulp into a container, or you can just chew the pulp. Another pilot who took off from San Diego also made a 180-degree error in his bearing, ran out of gas and had to ditch his plane over the Arizona desert. He had no food and water when he came down. Nine days later he was found walking along as straight as an arrow, apparently without a care in the world, but he had a cactus plant tied on him like a canteen.

After we picked him up he said, "I have a confession to make. I slept through some of your lectures but I was awake the day you talked about water. And it was a good thing, for it saved my life."

I asked about the "canteen" he was carrying. He said every time he got into a patch of this kind of cactus, he would drink all his body would hold (which was a good thing to do). He then always carried an extra one along in case he didn't find any during the next few days.

### Reverse Vine Method

Another way of getting water in the desert is the vine method in reverse. If you see a big bush or tree in the desert, you know it has to get water or it wouldn't be there. It gets water through its root system, and usually the roots of desert trees aren't too far under the surface of the sand. Beginning at the base of the trunk, scrape the sand away until you uncover a root for 20 or 30 feet. Cut the root into five or six sections. Each section is a tube full of water.

Still another method of getting water in the desert has been used hundreds of years and is still being used by several tribes in the great Australian desert where for six months out of the year they don't have a drop of rain. The deserts are hot in the daytime and cold at night, and this extreme change in temperature makes a heavy dew. At daybreak they take a cloth and wipe the dew off the dead grass and wring it out into a container. Some take sticks and cups and as they go along tap the drops of dew off the limbs of the dead brush and collect it. They are so adept at these methods they can get a quart of water every morning in less than an hour's time.

A statement that could not be made a few years ago is now true. Water is available almost any place on the earth where the sun shines. A solar still is the answer.



**ORIENTING TOPO MAP with compass is the first step in deciding on a course to be taken—provided you have a map and a compass!**

For a solar still you need a piece of plastic and a container. Heavy aluminum foil can be fashioned into a container and plastic that can be folded works well, and the whole outfit can fit in your pocket. The plastic should have a rough side on it similar to Dupont's "Tedlar." Both sides are rough on this kind, so it doesn't matter which side you place down. If you can't get rough plastic, ordinary plastic will work after scouring it with wet sand.

To get water from this still you dig a hole about 20 inches deep in the sand and about 40 inches in diameter. Place your container in the bottom of the hole. Lay the plastic over the top of the hole and seal the edges and hold it in place with the dirt you dug out. Place a stone on the middle of the plastic to depress it into a cone shape.

Now you are ready to collect water as the sun will draw moisture from the sand as water vapor and it will collect on the underside of the plastic sheet. When the drops get so big they will run down and fall into the container. If the plastic is smooth, most of the drops fall off and are lost before they are over the container.

Solar stills used in our driest deserts have collected from a pint to 1½ quarts of water every 24 hours. This was repeated for two or three days before they had to be re-located. Vegetation can be chopped up and put in the hole for the sun to draw its moisture out.

A third item which is helpful is a four-foot piece of rubber tubing such as is used



**A COMPASS ALWAYS should be carried on outdoor trips. Even without a map it can keep you traveling in a constant direction instead of wandering haphazardly.**

in a chemistry lab. When building the still, put one end of the tube into the container and bring the other end out the side. Now to get a drink you don't have to take the still apart; you simply siphon it out through the tube.

It takes the air inside the hole two or three hours to become saturated to the point where it starts to form water. A solar still just about solves the water problem any place in the world.

The other necessity in a survival situation is food. There are two kinds, plant and animal. Plant foods are hard to teach for there are thousands of poisonous plants in the world. Some are so deadly that one bite could be fatal. A good example is one you probably have had in your home—the poinsettia. One leaf could kill a child. Some parts of many plants are edible, while other parts are poisonous. For example, rhubarb stems are good but the leaves are deadly. The May apple is good to eat but the rest of the plant has sixteen poisons in it. Never eat a plant unless you are certain you know what it is. In military survival training, we taught about 10 plants that we had in this country and were found in other parts of the world. We told the men to avoid the others. The best advice is to learn from local

inhabitants perhaps three things in the area that are good to eat and are plentiful. Forget the rest.

Anyhow, don't worry—your chances of starving to death are very slim. You can eat anything in the animal kingdom except two things, and you're not likely to run across either of these. One is polar bear liver. It is poisonous because it contains so much vitamin A. A very small piece might be good for you, as a vitamin A pill is; however, if you ate a larger piece all of your hair would fall out. Sometimes Eskimo dogs eat too much, causing their hair to fall out and they freeze to death. A large portion could make you extremely sick or even be fatal.

There are three fish that are poisonous when found around coral islands. In other oceans and other parts of the world, they are good to eat. However, around coral islands they feed on something that makes them deadly poisonous. Easy to remember by their names, they are the puffer fish, the parrot fish, and the trigger fish. The puffer fish when out of the water puffs up like a big balloon. The parrot fish has a head that looks like that bird. The trigger fish has two fins on its back. One is shaped like the hammer of a gun and beneath it is a smaller fin like a trigger. If you pull the trigger fin, the hammer fin comes down with a snap or click and that's how this fish gets its name. Anything else from the animal kingdom is edible.

### **Number One—Knife**

If you have a few important pieces of equipment with you, your chances to survive any place in the world are good. Number one would probably be a good sheath knife or a machete and a strong pocketknife. Number two would be a waterproof matchbox. Pilots received one of these and in each we put a piece of metal. It was a special kind. Scratched with something sharp and hard, it made a hot spark that would start a fire. We called it mish-metal. Today's "metal matches" are the same stuff.

To use it, collect some dry tinder and slowly scrape off some of the metal. Nothing happens when you go slow. When you have enough scrapings, hit the metal match with a little heavier stroke. It will throw off a hot spark and ignite your scrapings, which will start the tinder. It's a good idea to carry a metal match and a piece of fine steel wool. Use the steel wool as tinder. Blowing on it will get it red hot and start practically any fire. Dry leaves or sticks added to the steel wool will build your fire in a hurry.



Or you can start a fire by taking the bulb out of a flashlight, placing the steel wool down on top of the batteries and turning the switch on. The spark off the battery will ignite the steel wool. The same can be done with a spark plug from a car. So a little piece of steel wool is a great thing to always have with you. Even if it gets wet the water can be squeezed or shaken from it for igniting. And a small piece of mish-metal will last you a lifetime if you don't lose it, and it will really work.

The Pennsylvania State University trained the first 600 Peace Corps students. My part of the training was to take them out in the woods and live with them for about a week, showing them how to survive and live off the country. When they left for the islands I told them to take some mish-metal along because it would be a great thing for getting acquainted with the natives. They no sooner got there than I got a flood of letters. They all said the same thing: "Send more mish-metal. The natives are going crazy over it. They call it magic metal and go around all day wanting us to make a fire." One native even offered to trade his wife for a piece of mish-metal, so you can see it's pretty valuable material.

Number three would be a good compass and a map to go with it. If they were going to send me any place in the world, the first

thing I would get would be a map of that area and a compass. I can't stress too much the importance of the compass and having it with you. Many of our pilots were provided a wrist compass which is always with you. The compass I use for training is beat up, scratched up, dirty, and coming apart, but it saved the life of an All-American football player twice during the war simply because when the emergency arose he had it on. That man was Tom Harman from Michigan, presently a sportscaster. The first time he was over South America flying south, about 180 miles in from the east coast and over the jungle. Something happened to the plane and everyone had to bail out.

Tom was the only one who was wearing his compass when he bailed out and he is the only one who survived. He knew if he went north, west, or south he would get back in the jungle so far he would never get out. That is probably what happened to the rest of the crew. Tom knew a due east bearing would take him to the coast and he would be all right. With a machette and his compass he headed east. After slashing his way through the jungle for five days he came out on a river, looked down the bank and saw a native village. He explained what had happened and they put him in a canoe and brought him out.

I went to see him after this experience

**AS PART OF THE TRAINING OF THE first 600 Peace Corps volunteers at Penn State, Kepler taught them survival methods proven by the U. S. Navy.**





**IT HAS BEEN SAID** that heat has no nutritional value, yet most of us prefer to cook our food, and this too can often be done if you have the know-how.

and we talked about his trip. He said it had been rough and he almost died of thirst because he had to go five days without a drink. I took him out and cut a vine the right way and the water started to run out of it. He almost fell over and died right there. He said he must have cut 10,000 vines to get through that jungle but no one had ever told him how to cut one to get a drink.

Less than six months later, in one of the wildest places in the world, his compass again brought him out. This time his plane came down in the mountains of China. He was smarter now and had other survival equipment with him and he got out without any trouble.

Number four item would be a good mosquito head net. In jungle country this could almost be number one. Food and water are easy to get if you know how, but the thing that licked many fellows was malaria. Mosquitoes usually come out only at night, so you can roll down your sleeves and put your hands in your pockets and you'll

be protected every place but your face. But if you don't have your face protected you'll be bitten and get malaria and you'll be so sick and weak you won't be able to get up and get the food that's available.

Actually, you need a head net every place in the world, even in the Arctic. Some places up there the mosquitoes are far worse than they are in the jungle. They are bigger, more vicious and more numerous. The only good thing about them in the Arctic or Canada is that they don't transmit disease. There have been cases where prospectors committed suicide, they were so bad. So a head net is important to any survival kit. And, of course, you'd need your material for a solar still.

### Stop and Consider

If you ever get lost and don't have anything with you, just stop and consider what you're wearing, because generally you have something that can be used. Almost everyone wears a watch. You can use it for a compass and you can use it for firemaker. Suppose you need to use a watch as a compass in the morning as the sun is coming up. Ignore the minute hand, point the hour hand at eight toward the sun, bisect the angle between eight and twelve on your watch, and that imaginary line is south. Suppose the sun isn't out. You can find the sun when it isn't out by doing this. Get into a clearing where no trees or banks can cast a shadow. Slowly move your knife blade or a stick back and forth over the crystal of your watch. Even though you don't see the sun, you'll pick up a faint shadow from it. Opposite the shadow is the sun. Point the hour hand there and bisect that angle to find south.

Now for a firemaker. Most watch crystals are made like a magnifying glass. Take the crystal off and you'll find that the bottom side is hollow or cupped. When the sun is overhead you can use it for a magnifying glass to start a fire.

Generally, you have something useful with you most of the time, if you just know how to use it. I hope none of you ever has a survival experience, but if you do I'm sure you will get out okay if you remember everything you have read. The most important thing is not to panic. A little preparation, such as the points outlined here, will prevent that.





# THE GREAT BLUE FLYING MACHINE

By Dr. Gary M. Ferrence  
and Becky Hynicka

**WE PARKED** our van along the berm of the road and waded through a field of hip-high grass and into the nearby woods. Fighting the soggy forest floor and mosquitoes, we made our way into the woodland until we approached a stand of tall deciduous trees. A five-minute walk had brought us to our destination—a great blue heron rookery. This was the site where the majestic migratory birds had constructed several hundred nests and were presently raising their young.

Even to a novice bird-watcher the presence of the rookery on the edge of the field was not completely concealed. The forest floor and low foliage beneath the trees were white-washed with excrement. An odor of fish permeated the air. The mid-afternoon quiet was broken by an occasional call which Andrew Meyerriecks describes as a *frawnk* sound.



Large masses of sticks and twigs could be seen balanced in the forks of branches high above the ground. These masses served as the nesting places for the great blue herons. As many as a dozen nests could be observed in one tree. Some nests were substantial: their thickness seemed to indicate a buildup and repair of many years. Other nests were so sparsely constructed that the blue sky could be seen through the twigs. Piles of what



**THE GREAT BLUE HERON** is North America's largest heron. Adults attain a length of approximately 50 inches and a wingspread of six feet.

appeared to be nest building materials were noticed in a number of places on the forest floor—probably the discards of previous years.

We were able to observe many herons in the treetops and flying overhead. With the aid of binoculars we became more aware of their activities. Their graceful shadows on the tree leaves as they flew by seemed inconsistent with their awkward landings near the nests. Their coloring appeared to be a gray-blue, giving a feeling of coolness which their lean, narrow bodies and spear-like bills accentuated.

Although the quiet of the rookery made us think that relatively few young herons were present, Mr. Selby, our guide, assured us that this was not the case. Apparently the young had had their fill of fish and frogs supplied by their parents. The impounded

water of the nearby waterfowl refuge provided a readily accessible source of desirable food organisms. During the early evening hours, Mr. Shelby said, the air of the heronry was filled with the sounds of young birds making their returning hunger known.

This visit to the rookery near the Pymatuning Waterfowl Refuge in northwestern Pennsylvania was our introduction to a fascinating and beautiful bird, *Ardea herodias*, the great blue heron. This species is North America's largest heron, adults attaining a length of approximately 50 inches and a wingspread of six feet. Its back and wings are bluish-gray, with the primary feathers noticeably darker in color. The crown and forehead are white, while the feathers on the side of the head are black. The bird displays long black occipital plumes which extend from the back of the head. The breeding range is from southern Alaska, Alberta, and New Brunswick to southern Mexico, the West Indies, and the Galapagos Islands.

#### Plumes Made Problems

It probably was the plumes of the heron which brought the bird to the general public's attention. During the last decade of the 19th century, plumes were an extremely popular fashion accessory, especially for nuptially minded young women. The men who gathered the plumes found it easier to take them from a dead bird than from a live one. As a result, the blue heron and many of its relatives faced extinction. Defending the birds against plume collectors was the first big campaign of the Audubon Society. By the 1920s it was unlawful to hunt herons here.

Apparently the Society's campaign also kindled ornithologists' interest in the birds. In Arthur Cleveland Bent's book, *Life Histories of North American Marsh Birds*, some of the earliest recorded heron observations date from the Gay Nineties. Then as today, ob-



servers were intrigued by the dignity and grace of this stately bird.

The female heron lays her eggs in April or May. Four is the commonest number, but three or five eggs are not unusual. The eggs are incubated for 28 days, both parents taking part. The young are fed by both parents and will remain in the nest until fully fledged if they are undisturbed.

Although the great blue heron nests in flocks, it is by contrast a solitary fisher. Meyerriecks describes the bird's two fishing techniques as, first, the "stand and wait" behavior, in which the bird is stationary and may even appear to be asleep, while its gaze constantly follows the intended prey; and second, the "wade or walk slowly" technique, which is just what the name suggests, combined with a wing flicking which the author felt was intended to startle its prey. By either technique the bird's quick strike can mean death to bass, herring, salamanders, frogs, eels or tadpoles, to name a few of its foods.

Today, in our over-populated world where many of nature's beauties face annihilation, the future of the great blue heron seems to be relatively secure. Concerned people are responding to the need to care. For instance, the citizenry of Stone Harbor, Cape May, N. J., have given 21 acres in the middle of town (property said to be worth millions) as a sanctuary for herons and their feathered relatives.



**THE PLUMAGE OF THE** heron brought this bird to the public's attention. During the late 19th century, plumes were an extremely popular fashion accessory.

Areas such as Stone Harbor and Pymatuning and men such as Mr. Shelby demonstrate a human concern for the welfare of this bird which is gratifying.

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## Ducks Unlimited Makes Record Commitment

Ducks Unlimited, Inc., the nonprofit waterfowl conservation organization, will finance construction of a record 104 prime wildlife breeding habitat areas in 1972. The program is expected to cost almost \$3 million.

All of Ducks Unlimited's projects, although financed by U. S. conservationists, are located in Canada, where 80 percent of the continent's waterfowl originates. The 1972 program will see work done on over 100,000 acres of wetlands habitat set aside for waterfowl and other wildlife purposes. Ten projects will be located in British Columbia, 36 in Alberta, 23 in Saskatchewan, 23 in Manitoba and 12 in the Maritimes.







# Red at Night . . .

By Bradford Angier

**T**HE SQUIRREL, so delicious when broiled over the ruddy coals of a campfire, can be of even more value as a short-term weather prophet. During cold weather if you see him and his kin working in front of their homes on a fresh heap of cones, it's going to storm, and you'd better be figuring on not hunting too far afield. The bigger the pile, the longer the storm!

But not even the squirrel is of any value as a long-term weather forecaster. Old-wives' tales that if his fur grows especially thick in the fall, it's going to be a hard winter—or if he stores a larger supply of food, the frosty weather is going to be prolonged and severe—are, despite their seeming logic, just folklore.

Scientific research has discovered no foundation in any of the tales, however charming, that give nature the ability to forecast weather over the long term. The thickness of hickory nuts or, for that matter, the staunchness of goose bones give no indication as to what the weather will be. The thickness of fur on any animal carries no portent weatherwise.

The depth of a bear's den is no indication of what the winter will be. Even when bruin comes out earlier than usual in the spring, only to waddle back to his bed, it doesn't indicate more cold blasts but merely that there isn't yet enough fodder for his huge appetite.

When the groundhog doesn't glimpse his shadow on February 2, the cold and snow are not necessarily gone for another season. When fat-cheeked chipmunks are particularly industrious in filling their winter caches, it is no true indication that a severe winter will follow.

If such migrating birds as geese, swans, cranes, and ducks could sense the weather for more than a few hours ahead, such great flocks would never be entrapped and decimated by storms or by returning north to their nesting grounds too far ahead of the tardy spring.

## Short-Term Weather Signs

Even if such easily observed natural signs have no bearing on the long-term weather, their short-term value is an entirely different matter. Animals, for instance, do have built-in barometers which let them accurately forecast the weather a day or two in advance.

Particularly when you consider two or more of these signs together, they can be lifesaving in that they'll give you an accurate idea of when to remain near camp and when it will be most opportune to cast farther afield. Even then the following two associated proverbs should always be taken into consideration: "In dry weather all signs fail," and "In wet weather it rains without half trying."

Even the smoke of your lone campfire has its story to tell. If it rises steadily, fair weather will be with you. On the other hand, if the smoke is beaten downward after rising a short way with the hot air, it's a reliable sign of an approaching or continuing storm.

If the morning is gray, it will be a good day to travel. The thus-signified dry air, lying above the haze caused by the collection of dew on the low atmosphere's dust, prognosticates a fair day.

Conversely, a red sky or red sun at dawn forecasts approaching storm, although this effect can be made de-

ceptive by the smoke of great forest fires. The crimson is still deepened, though, by the tale-bearing presence of excessive moisture in the air. A red sunset is something else again. This indicates that the atmosphere holds so little moisture that rain or snow within the next 24 hours is highly unlikely.

An overcast and gray evening sky shows that the moisture-bearing dust particles in the atmosphere have become so laden with water that the state of affairs favors rain. When sudden green light blinks from the afternoon sun as it descends below a clear horizon, fair weather is likely for at least the next day.

### Rainbows and Sundogs

A rainbow or sundog late in the afternoon is a sign of fair weather ahead. However, such refractions and reflections of the sun in atmospheric drops of water, pellets of ice, spray, or mist in the morning, tell the sportsman to take warning.

The corona, the usually colored circle appearing around either the sun or moon when one of these is glowing behind clouds, is a dependable weather sign. When this circle expands more and more, it shows that the drops of moisture are evaporating and that the day or night likely will be clear. When a corona shrinks as time ensues, it is a sign that the water drops in the clouds are becoming so big that rain is almost certain to descend.

When thin but tight cloud cover slowly enshrouds the moon, the span of good weather is coming to an end.

On the other hand, a night sky bright with stars is a favorable sign. Except near large bodies of water where fog may be deceptive, when only a few stars twinkle, the favorable weather is nearly finished.

The loftier the clouds, the better the weather. Indications are even more favorable when only scattered clouds, especially when they are decreasing

in numbers, are separated by bright clear blue.

The consolidating of clouds, particularly in a sky that is already milky, does not foretell as favorably.

Frost and dew blanket the ground, bush, and grass in sparkling abundance only when the atmosphere is so dry that snow or rain can hardly fall. On still nights either frost or dew, depending on the temperature, fail to precipitate only when conditions favor wet weather.

As stormy weather nears, hemp rope, shelter canvas, and wooden-handled hatchet and ax heads tighten with the increasing dampness. Any salt you may have in your outfit picks up moisture. Curly hair, both in humans and animals, becomes more ungovernable.

When you're in hilly or mountainous country, the appearance of morning mist lifting from ravines and gorges is an ideal sign of fair weather.

In fair weather, you should hunt upward when you leave camp early in the morning and downward when it's time to return to your outfit, because thermal air currents drift down hill-sides and streams in the early afternoon. They begin flowing back near sunset. Any reversal of these air currents warns of approaching stormy weather.

When sounds are audible more clearly, and you can hear distant noises such as the *hoo-ho-ho-hooing* of a faraway owl more distinctly, wet weather is coming your way.

Another sign of the nearing storm is the increase of high winds and their gradual extension to lower and lower climes, causing the mountains to roar and even the forests to murmur.

Insect-eating birds such as swallows feed higher when the weather is to be fair, lower when a storm is approaching.

You can also forecast stormy weather by your sense of smell in that ground, muskeg, swamp, marsh, and tideland odors become more preceptive.



Finally, anyone who has a touch of rheumatics, ulcers, corns, or other such ills can forecast the weather by his sense of feeling. Increasing discomforts will mark the approach of bad weather.

**Barometer**

If you have a little aneroid (fluidless) barometer with you in the wilderness, the table at the bottom of this page will help you read it in the United States and Canada.

**Clouds as Signposts**

Clouds are one of the most reliable symptoms for the sportsman's weather forecasting procedures. You have to keep watching them, though. Even more important than the formations predominating at the moment is the way a cloud cover changes.

What actually is a cloud? Water molecules condense on dust and other particles in the atmosphere when moist air cools. As more and more of these molecules amass, they become drops of water or pellets of ice. When enough of these drift together, they collect into a cloud. The kind of cloud this is prognosticates the weather.

**Cumulus Clouds**

The familiar cumulus cloud is the fair-weather cloud. Moreover, clear

nights generally follow days during which cumulus clouds march graphically and spectacularly across the heavens.

Cumulus clouds are formed by warm air soaring skyward and condensing its water vapor in the increasing coolness of the upper atmosphere, heaping these drops of moisture into flat-based mounds. In later afternoon, when this process slows, such clouds become small or even nonexistent, whereas during the day they measured from about 1000 feet to over a mile high from puffy tops to flat-topped bottoms.

**Fractocumulus Clouds**

Fractocumulus clouds indicate the presence of high wind, being formed when lofty gales tear the gently amiable cumulus clouds into tatters and hurtle these across the skies. Their speed helps you to differentiate between them and young clouds that have not yet reached maturity. In late afternoon when the winds of the world ealm with the sunset, as they do again at dawn, fractocumulus arrays also dwindle to leave a clear fair sky.

**Stratocumulus Clouds**

Light showers may filter down from stratocumulus clouds. Yet these formations ordinarily dissipate to cumu-

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<i>Barometer</i>	<i>Wind</i>	<i>Weather</i>
High, steady	S.W. to N.W.	Fair with little temperature change for one to two days.
High, rising steadily	S.W. to N.W.	Fair with warmer weather and rain within two days.
High, falling rapidly	E. to N.E.	Summer, rain in 12 to 24 hours. Winter, snow or rain with increasing wind.
Very high, falling slowly	S.W. to N.W.	Fair, with slowly rising temperatures, for two days.
High, falling slowly	S. to S.E.	Rain within 24 hours.
High, falling slowly	E. to N.E.	Summer, light winds and fair. Winter, precipitation in 24 hours.
High, falling slowly	S.W. to N.W.	Rain within 24 to 36 hours.
Low, rising rapidly	Shifting to W.	Colder and clearing.
Low, rising slowly	S. to S.W.	Clearing soon and fair for several days.
Low, falling slowly	S.E. to N.E.	Rain for one or two more days.
Low, falling rapidly	E. to N.	Northeast winds with heavy rain or snow, followed in winter by cold.

lus or fractocumulus by the middle of the afternoon, later disappearing entirely to leave a clear night sky. They also form at sunset, however, when cumulus clouds blend into each other before thinning and disappearing. Stratocumulus clouds, spreading in irregular patches or layers, are not as puffy and fluffy as cumulus.

### Stratus Clouds

Although stratus clouds often bring light drizzles, they seldom develop rain. On the other hand, when stratus clouds form thinly during the night to cover the morning sky, they generally augur a warm clear day.

Flat on both top and bottom, stratus clouds are layers of water particles. When one nears you, its edge seems to be almost straight and nearly of equal thickness all the way through. Some cover all that can be seen of the sky. Others are small. The thickness of these formations varies, too, from

nearly one-quarter of a mile to a few luminous feet.

The high coastal fogs of Newfoundland, Maine, and California, compounded by the mixing of cold and of warm moist air above the swirling ocean currents, are stratus clouds that develop nearly 1000 feet above the water and thicken downward. Such fogs ordinarily dissipate in sun-warmed skies.

Yet stratus clouds are predominant when the center of a low-pressure area is approaching. Then the stratus is usually succeeded by the denser nimbostratus, characterized by rain or snow. While the low is passing, the thick nimbostratus may change again to stratus or to wind-broken fractostratus. This latter generally vanishes to leave a clear sky alive with cirrus tufts.

### Nimbostratus Clouds

Nimbostratus clouds 75 percent of the time mean rain or snow within four or five hours. The lengths of such storms vary. During the winter months snow often slants down from them for about eight hours.

These layers of dark rain or snow clouds, graying the day, often blanket the sky for miles. Some nearly scrape the treetops, although their average height is some 3500 feet, while others sail almost three miles above the damp earth. Bits of cloud that surge beneath them are called scud.

### Cirrus Clouds

When the morning sky is vividly blue above cirrus clouds, the formations will likely disappear into clear skies before noon. This occurs when the warmth of the morning sun meets the floating ice of these clouds, which take shape some five to seven miles above the earth, turning them to vapor.

Cirrus clouds are like thin wisps and curls of soft hair, some elongated by the wind until only a twist remains at one end. Others seem caught in sil-



**A CAVE OR OVERHANGING bank makes a safer shelter during a thunderstorm than a tree. Lone trees are prime lightning attractors—avoid them.**



very mesh that nearly encloses the heavens. Those that are blown into wisps are known as mares' tails.

### **Cirrostratus Clouds**

When instead the heavens above the cirrus clouds are gray, rain or snow is probably in the offing. Then the formations will probably soon thicken to cirrostratus, indicating that a storm is no farther than a day away.

Cirrostratus clouds, also made up of particles of ice, resemble white veins, often embellished with milky scraps and stains. Both the moon and the sun, gleaming mistily through them, form hazy rings of luminosity known as halos. Such clouds may soar as high as the loftiest cirrus. The largest and thickest of them, however, are generally no more than some 18,000 feet above the earth.

### **Altostratus Clouds**

While the storm area is nearing, the cirrostratus formations thicken and lower to altostratus which either completely envelop the moon and sun or let their brightness through in formless blobs of light. Altostratus clouds resemble gray or dull blue haze, spotted or striped with dense streaks or patches. The snow or rain that generally follows is ordinarily steady but not particularly hard. These formations range in elevation from some two to 3½ miles.

### **Cirrocumulus Clouds**

Nearly always an omen of fair weather, cirrocumulus clouds generally show up the first or second morning after a storm, commonly dissipating that forenoon to leave a brilliantly blue sky.

The well-known mackerel sky, resembling the colorations on this fish's back, is composed of scudding rows of cirrocumulus. Being composed of ice, at heights of from three to five miles, cirrocumulus formations are about halfway between the puffy cumulus and the wispy cirrus. They



**THE CORONA**—the usually-colored circle appearing around the sun or moon when one of these is glowing behind clouds—is a dependable weather sign.

are frequently in the neighborhood of cirrus and cirrostratus. They are so thin that sunlight diffuses through them brightly.

### **Alto cumulus Clouds**

Another fair-weather cloud, the alto cumulus ordinarily reveals itself on the first day after a storm or comes into being above dissipating stratus. On the other hand, when such alto cumulus clouds pile up in towers and castles, it is generally an indication of showers some eight hours away.

The sky often seems packed with clustered white mounds, so tightly do these high, small, white clouds follow each other. Drifting from one to four miles high, they are occasionally beset by vertical air currents that cut them into flakes not unlike that of a mackerel sky. The under parts of these clouds are often gray, however, and the bigger ones dart their shadows across ground and water.

### Cumulonimbus Clouds

Ordinarily forming on hot moist days, these towering mounds of rain clouds often drop hail as well as rain-drops. Inasmuch as they also contain thunder and lightning, they are known, too, as thunderheads even when they do not result in precipitation.

Thunderheads begin as puffy cumulus clouds some 2000 feet above the earth, piling and towering into spectacularly portentous mounds up to seven miles high. When these dazzling white piles are toward the southwest, they can be expected to approach steadily, darkening colorfully as they do so. Blankets of rain can also be seen in the distance. Then the day abruptly darkens and chills. Later the precipitation abruptly slackens. The thunder again becomes ominous in the distance. Invigorating wind, cool and fresh, drives out of the west.

Few people are harmed by lightning and observing a few safeguards will minimize even this small degree of peril.

When you take shelter during a sudden storm, keep away from tall, lone trees which are prime lightning attractions. Small evergreens offer much drier, as well as comparatively safe,

cover. So does a cave, a stable overhanging bank, or even a niche among boulders.

If you happen upon a large airy building such as a barn, keep out of it, as the volume of warm dry air invites lightning bolts. It is safest to lay down such natural lightning rods as metal fishing poles. If you are caught in the open, your safest course will be to lie prone, perhaps taking an emergency plastic sheet from your pocket and anchoring it over you.

#### About the Author

*Bradford Angier spends most of his time in the far reaches of North America's wilderness, but occasionally stops long enough at his home, "Sea Hill," in Cambria, Calif., to produce such best-selling outdoor books as "Living Off the Land," "How to Live in the Woods on Pennies a Day," and "Free for the Eating." His latest, "One Acre and Security," has recently been published. All are available from Stackpole Books, Cameron and Kelker Streets, Harrisburg, Pa. 17105.*

*We are sure you'll find this article on weather highly informative. GAME NEWS will carry more articles by Mr. Angier in future issues.—Ed.*

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## Attention Dove Hunters

Again this year the Pennsylvania Game Commission and the Wildlife Research Unit of Pennsylvania State University are conducting research on doves in southeastern Pennsylvania. A vital part of this study includes a wing survey which will be carried out during the upcoming season. Wings from harvested doves will be clipped and sent to a centralized point where they will be examined and much useful information gathered.

The study area has no definite boundaries, but includes roughly the land east of U. S. Route 81 and south of U. S. Route 78. Any sportsman planning to hunt doves within or near this region can participate in the study by sending his name and address to Pennsylvania Cooperative Wildlife Research Unit, 113 Ferguson Bldg., University Park, Pa. 16802, or to Lou Hoffman, Study Coordinator, 731 North George Street, York, Pa. 17404.

Your help will be greatly appreciated. Survey results will be sent to all those participating.



# Click Beetles

By Carsten Ahrens

Photo by Leif Ahrens

**T**HE INSECT pictured here is the largest of our click beetles, snap bugs, or skipjacks—take your choice, they're all common names for the same group of insects. The worker of crossword puzzles knows if the clue is "click beetle," the word wanted is probably "elater" or even "eyed elater." The scientist calls this one *Alaus oculatus*. It's the most elaborately marked of the "clicks" and one of the largest, growing to 1½ inches or more in length.

One wonders at the bold design on this species. The two large satiny black spots, each surrounded by a white ring, are not on the small head but on the large, shield-shaped thorax. If you follow down the many-jointed antennae to their bases, you see the usual compound eyes with which most insects come equipped. Does a bird, lizard, or skunk regard this jumping, clicking, great-eyed something or other with suspicion and decide to avoid it in its diet for something less startling? One really doesn't know, but he's tempted to mark this theory "true."

The group has a number of traits that are characteristic of all. The tiny white eggs are laid in soil or decaying wood. After they hatch, the larvae spend from two to six years in a form most unlike the adult beetle. During these years, gardeners call them "wire worms" because they are long, slender, generally dark colored, and highly polished. The larvae eat voraciously of any of the underground plant parts: the hair roots of any plants; branching roots of cereals and legumes; tap roots of carrots, parsnips, beets, and similar crops; tubers of potatoes; bulbs of onions, into which they eat holes that



**THE TWO LARGE** black spots on this click beetle are not eyes; in fact, they're not even on its head but rather on the thorax. The true eyes are at the bases of the antennae.

often so disfigure the vegetables that they are unsalable. Their presence is deplored by growers of tobacco and sugar cane, for the larvae attack both seedlings and growing crops. In a study made in England of grassland insects, certain wire worms were found in numbers estimated to be as much as 25 million per acre.

As adults, the "clicks" are more curious than troublesome. They no longer bother crops. If you pick one up, it immediately plays possum.

When the "dead" insect is placed on its back, it arches the body so that only the extremities are touching the supporting surface. Then with a sharp click, the animal is catapulted into the air, and if it lands on its six legs, it quickly runs away. Should gravity bring it down on its back, it will click away until it alights correctly.

Speaking of "clicks," a tiny, 3/4-inch

long, chocolate-brown click beetle just crawled onto the picnic table where I'm typing. I picked him up. He pulled in his legs and played dead for an instant. The next instant he had shot himself a good eight inches into the air, and he repeated the acrobatics without injury to himself four times until a final leap took him to safety in the grass.

**"Duck Stamp" Price Goes to \$5.00**

Cost of the Migratory Bird Hunting Stamp, generally known as the "duck stamp," has been increased to \$5 for the 1972-73 waterfowl season, according to Assistant Secretary of the Interior Nathaniel P. Reed. This is an increase of \$2. All proceeds from the sale of duck stamps go into a fund for the acquisition of wetlands and refuges for migratory birds, the costs of which have risen greatly in recent years. Duck stamp sales have averaged about two million per year over the last five years, nationwide. Last year, Pennsylvanians bought 81,074. A duck stamp is required for everyone who hunts migratory waterfowl and has reached his sixteenth birthday. A state hunting license also is required.

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# a look at ... HUNTING & WILDLIFE



**THESE HUNTERS ARE PREPARING** to put on a deer drive in an area which has had some border cutting to provide browse.

## The Five Eras of Wildlife Management

By Donald Zimmerman

Wildlife Conservation Education Specialist

**T**O UNDERSTAND today's wildlife management programs, a look at the historical development is helpful. The refinement of wildlife management, a science-art, has taken many years and only the more efficient management techniques survive.

Wildlife management has undergone development in most states similar to that in Pennsylvania, with eras of laws and restrictions, predator controls and bounties, game refuges and sanctuaries, artificial propagation and stocking, and environmental controls and habitat management. Rather than try to date these periods, which would

be difficult due to overlapping, we'll merely point out some of the more important events of each.

First was the era of laws and restrictions. Hunting was permitted under William Penn's Charter, and the first Pennsylvania law governing the taking of wildlife was enacted in 1721, when Sir William Keith, governor of the province, prohibited the taking of deer from January 1 to July 1. Violation of this law carried a 20-shilling fine.

As needed, more laws were enacted, and in 1873 the comprehensive Wildlife Act was passed. Most important

of the laws governing Pennsylvania's wildlife was the 1895 act creating the Board of Game Commissioners. Within a year the first commissioners were appointed and the Game Commission began to manage the wildlife resources.

Though licensing began with a \$10 nonresident fee in 1901 and a \$1.00 resident license fee in 1913, the accumulated money from these sales was not returned to the Commission until 1915, when \$282,981 was received.

In 1923, all laws pertaining to game were codified. Subsequently, they became known as "The Game Law(s) of Pennsylvania." The Game Law was recodified in 1937 and this is the basic law under which the Commission operates today. Since 1937 the laws have been revised, changed and amended as needed to give the Commission the necessary authority to insure efficient and judicious management of the wildlife resource.

Second of the wildlife management eras was that of predator control. Though a 1683 bounty of 10 and 15 shillings was offered for wolves and a three pence a head bounty for red and gray squirrels, such efforts were not intended for game management but to control wildlife destroying settlers' livestock and damaging their crops.

#### **Bounties Don't Pay**

In 1937 the Game Commission was given the authority to provide bounty payments, a program which continued until 1966 when all bounty payments ceased. Bounties had not encouraged the taking of enough predators to decrease their impact on small game populations.

The third era, that of refuges, was undertaken to provide a sanctuary for wildlife. For many years, thousands of acres of State Game Lands were fenced off with a single strand of wire carrying signs designating areas as propagation or refuge areas. Eventually, after several years of evaluation



**MANY ACRES OF eroded land in Pennsylvania are being reclaimed by planting. Eventually they will provide food and cover for game.**

and research, it was determined that refuges were not vital to farm and forest game species. Since then, the number of refuges has been gradually reduced.

However, the value of refuges and sanctuaries for migratory waterfowl was soon recognized. Ducks, geese and swans need undisturbed resting, loafing and feeding areas along their spring and fall migration routes. Management of such areas prevents over harvesting and insures that a sufficient number of waterfowl will return to their breeding grounds.

The fourth era was that of artificial propagation and stocking. Most successful of the birds and animals introduced was the ring-necked pheasant. The first appreciable numbers of this bird were stocked in Pennsylvania in 1915, and the first game farm for ring-neck production was opened in 1929. This, along with a trap and transfer program, helped to establish this exotic game bird throughout many parts of the Commonwealth.

Today, in addition to the ring-necked pheasant, bobwhite quail, wild turkey and mallard ducklings are reared at the Commission's game



farms. Though most ringnecks are stocked in season to provide additional hunting recreation, some birds are stocked each spring.

The current era of wildlife management—controlling habitat—is the outgrowth of investigations, research and study of game animal populations and their environment. These efforts have led us to recognize the importance of adequate habitat for our wildlife resources.

Proper management of wildlife habitat begins with an understanding of the soil, water and plant community. All are crucial to wildlife populations. Through the years more efficient habitat management programs and policies have been adopted to provide optimum wildlife populations.

State Game Lands, the first tract of which was purchased in 1920, are managed to provide optimum game habitat.

Of today's wildlife management practices, the laws and regulations and habitat management are the most important. Refuges, stocking and predator control have lesser importance in the overall picture.

Through constant review, study and evaluation, wildlife management in the years to come will be refined to provide the maximum of wildlife resources for the enjoyment of all citizens.

#### Suggested Reading

*A Manual of Wildlife Conservation*, by R. D. Teague. The Wildlife Society, Inc., Washington, D. C.

*Game Management*, by A. Leopold. Charles Scribner's Sons, New York City, 1933.

GAME NEWS, 75th Anniversary Issue, July, 1970. Pennsylvania Game Commission, Harrisburg, Pa.

"Pennsylvania's Wildlife Conservation History," Pennsylvania Game Commission, Harrisburg, Pa., 1970.

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## Books in Brief . . .

(Order from publisher, not from Game Commission)

*The Shrinking Outdoors*, by Gary Jennings, J. B. Lippincott Co., East Washington Square, Philadelphia, Pa. 19105, 1972. 191 pp., \$5.50. Observations on man's wastefulness and ignorance in regard to the environment.

*Shotguns and Shooting*, by E. S. McCawley, Jr., D. Van Nostrand Co., 120 Alexander St., Princeton, N. J. 146 pp., \$5.95. Excellent advice on basics of smoothbore shooting from a shooter of long experience.

*Backpacking*, by R. C. Rethmel, Burgess Publishing Co., 426 South 16th St., Minneapolis, Minn. 55415, rev. 1972. 8½x11 paperbound. Sound advice on most everything a camper who packs his own equipment and food should know.

*Modern American Pistols and Revolvers*, by A. C. Gould. (Originally published 1888). 222 pp., \$3.50. Stackpole Books, Cameron and Kelker Streets, Harrisburg, Pa. Interesting data on early handguns and gunners.

## York County Snake Hunt

The annual York County copperhead snake hunt will be held on August 19. Registration will begin at 7 a.m. at the Indian Steps Museum, Airville, R. D., and the hunt will end at 4 p.m. Snakes may be hunted anywhere in York County. No snakes will be killed. The hunt is sponsored by the Conservation Society of York County.



**WITH FACE** masked, contestant above uses unusual equipment—bamboo rake and hunting cap—to impersonate bird. Below, other callers record efforts on film.



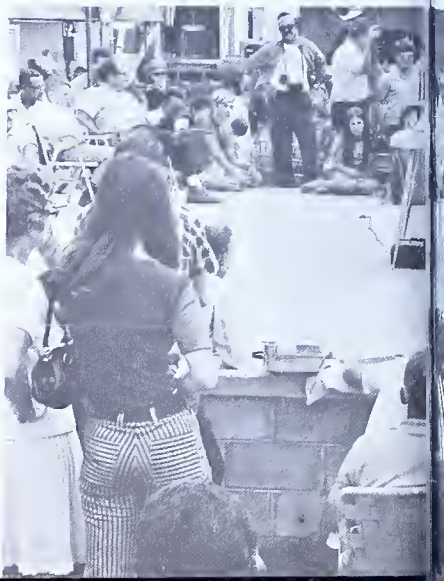
**1971 WINNERS WITH** Trexler: Harold Lesh, Graybill and Chester L. enbaugh, 3rd; and Le...



**THERE ARE NO** minimum age requirements in contest—as youngster below proves. Crowd at right shows popularity of this annual event.

## Turkey

**THE EIGHTH ANNUAL** Calling Contest will be held at 10:30 a.m., EDST, Rt. 995 about 12 miles north of Franklin. The event has become extremely popular, attracting a large crowd from many surrounding areas. The contest is based on five categories and the individual's score.







Commission's I&E Chief, Roy  
Hensbury, 4th; Harvey  
1st place; Gene Luck-  
in, out-of-state winner.

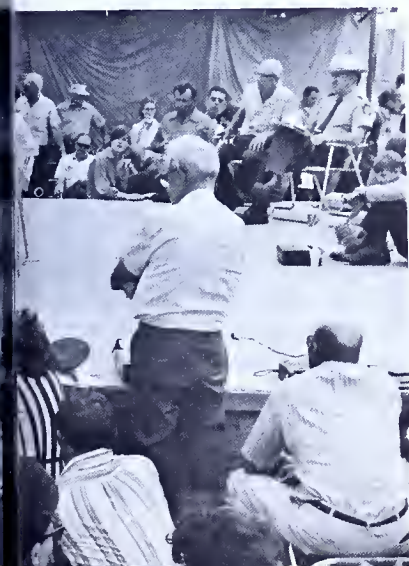
## Contest

Pennsylvania State Turkey  
this year on August 26  
Franklin County Fair, on  
of Chambersburg. Spon-  
sored Sportsmen, this  
popular, with contestants  
show their prowess. Scor-  
ing, yelp, whistle, gobble,

Photos by Joe Osman



**SPECTATORS RECORD** calls, at top;  
below, Judges Gene Nelson, Roger Lath-  
am and Bill Britton work on their tally  
sheets.





# FIELD NOTES



## Making Progress

**ERIE COUNTY**—There seem to be more hawks in this area than in past years. Could be the law against killing hawks is doing some good.—District Game Protector G. E. Gibson, Corry.



## Do-It-Yourselfer

**TIOGA COUNTY** — Every Game Protector in the state undoubtedly has talked with sportsmen at some time or another on the merits of stocking certain wild birds or animals to improve hunting in a particular area. For instance, one gentleman asked me if it was all right to bring some cub bears in from Canada to release. This was unusual, but I heard a new one this past month. A man who owns a few hundred acres here told me he buys and releases 20,000 worms every year to help the woodcock hunting on his land. I really don't know if this helps or not but he believes it does.—District Game Protector F. A. Bernstein, Knoxville.

## Quite a Show

**CLEARFIELD COUNTY** — Local sportsman Tom Duseh, while taking a visiting friend from New York on a tour, was asked the identity of a roadside shrub. "Mountain laurel, Pennsylvania's state flower," was Tom's reply. "And that over there is a hemlock tree, which is Pennsylvania's state tree," continued Tom. Just then a deer ran out of the woods and crossed the road in front of them. "And that was Pennsylvania's state animal right there," added Tom. Mother Nature then continued to cooperate by sending a grouse out of a thicket and likewise across the road in front of a proud Pennsylvanian and a somewhat startled New Yorker. "And that, my friend, was a ruffed grouse which is Pennsylvania's state bird," Tom said. Too bad someone couldn't have been carrying a string of brook trout and walking a Great Dane down the road about that time, for they of course are the remaining state representatives. But then the New Yorker would have been positive that the entire array had been prearranged just for his benefit.—District Game Protector G. J. Zeidler, Roekton.

## Quebec Requires HS Course

**BERKS COUNTY**—Have been getting calls from local residents who journey to Quebec to hunt. Seems a new regulation there requires *every-one* to prove he has completed a Hunter Safety Course. This will add to our load of applicants.—District Game Protector J. A. Leiendecker, Reading.



## Brown Bruin

**McKEAN COUNTY**—The other day I noticed a group of people standing on the highway just below my house looking over the hill. Then a neighbor boy came running over and said they had just seen a brown bear cross the road and go in the direction they had been looking. I went down but the bear had disappeared. I went back home and was told the bear was up in the orchard. Upon checking the orchard with my binoculars, sure enough there was a big bear there and it was brown in color. This is the first cinnamon bear that has been sighted in my district since I came here in February, 1969.—District Game Protector J. E. Rankin, Port Allegany.



## In Line of Duty

**JEFFERSON AND CLARION COUNTIES** — While assisting two Game Protectors at an outdoor education program at a school, a black snake being displayed cooperated by biting one of the Game Protectors on the finger to show a perfect example of a nonpoisonous snakebite. No real harm was done, only a reddened row of little tooth marks on the finger. However, I doubt if this will become a planned part of future snake displays.—Land Manager L. L. Harshbarger, Knox.



## Father Knows Best?

**SOMERSET COUNTY** — A father was giving his son advice in the methods of tapping maple trees. The young fellow made no complaints, just listened like a good son. The following day they were checking these taps. When they came to the tree the father used in his tapping instructions, he remarked, "This one we will have to remove." The son replied, "Yes, I guess so. It's an oak."—District Game Protector J. Burns, Jr., Central City.

## A Full Day

**YORK COUNTY**—An orchard owner in the southern part of the county had quite a day with wildlife recently. While he and one of his hands were grafting trees in the orchard, two pheasants were fighting fiercely in the next field. He separated them once, only to have them get together again. And again he separated them. Then another of his hands was mowing and found a fawn. This was placed near the woods and they watched the doe reclaim it. Upon returning to continue grafting, they found a groundhog had stuck his head in the grafting wax bucket and was running around with it on his head. They rescued him from the bucket and figured they and the wildlife had sure had a day of it.—District Game Protector R. L. Yeakel, Red Lion.

## Clean Up Squad of One

**WYOMING COUNTY**—We recently had some unexpected help in removing dead deer from our highways. A deer was killed on Route 487 and either dragged or knocked to the north side of the highway. Some men saw the deer when they passed in the morning. Later, they came back and noticed a bear standing a short distance from the highway, on the south side. Upon checking, they found the deer had been dragged across the road and placed behind a huckleberry bush. The deer could not be seen from the road, even though it was not over 50 feet from the pavement. Since the bear was outnumbered, it decided to depart without waiting for the meal. Later that evening, I checked and found the bear had not yet returned for the venison.—Land Manager G. E. Sprankle, Mehoopany.



## Money to Shoot

**LANCASTER COUNTY**—Shooting clay birds can become expensive if you follow these rules: 1. Place \$85 in the barrel of your shotgun. 2. Forget it is there. 3. Shoot at a clay bird. 4. Pick up the green confetti. 5. Collect \$65 from the bank for matching serial numbers you found.—District Game Protector R. E. Gosnell, Millersville.

## Seeing's Believing

**ROSS LEFFLER SCHOOL OF CONSERVATION**—During the Brookway Sixth Grade Conservation day, Student Officer Shultz received an unusual reply when asking the students the identity of the large bird at the top of the Birds of Prey chart. All of the golden eagle but its head is obscured by the bald eagle, and the bird was identified as a "two-headed hawk."—Trainee Barry K. Moore.

## Early Riser Benefits

**CRAWFORD COUNTY**—One morning recently I was unable to sleep and so got up just before daybreak and went to Hartstown Swamp. While canoeing there I saw a raccoon coming out of the water, his pelt soaked. And then I heard a noise and it was three deer coming to the water for a drink. While fishing for bluegills, carp 24 to 30 inches long surfaced near the canoe. You could see them coming by the wake they left in the water, as they were just under the surface. Many birds were flying about and on the way out of the swamp I noticed smoke on one of the islands and investigation showed that a tree had been hit by lightning the night before and was still burning. It seems we miss a lot by sleeping late some days.—District Game Protector L. V. Haines, Linesville.

## Stay Away From That Kind!

**BLAIR COUNTY**—While working a Game Commission exhibit, we heard a number of "quotable quotes." One statement that comes to mind was made by a youngster who was checking out the mammal charts on display. "Come here, Dad," he said, "there's the kind of squirrel I saw in the yard—the black and white one."—District Game Protector H. L. Harshaw, Hollidaysburg.



## Perennial Problem

**ROSS LEFFLER SCHOOL OF CONSERVATION** — District Game Protector Yocum from Venango County stopped at the training school to show the class a cub bear. This bear will probably spend the rest of his life behind bars in a zoo. Someone had come upon him in the wild, thought he had been abandoned by his mother, and took him home. I don't know how many times it has been said, but here it is again — Leave wildlife in the woods; they can fend for themselves. — Trainee John R. Randolph.

## Bring 'Em Back Alive

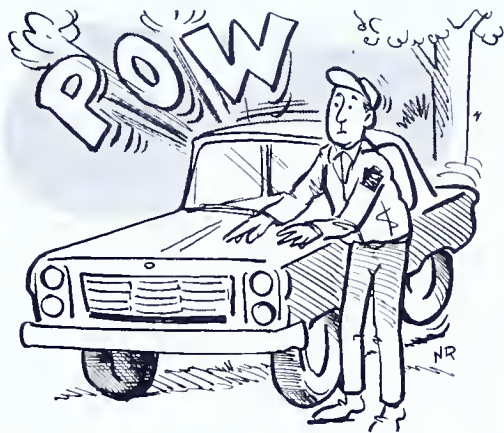
**BRADFORD COUNTY** — While on patrol in Monroe Township, accompanied by Bill Shipp and my Labrador retriever, we came upon a gray fox kit alongside the road. I put my flashlight on it and it started to run. About that time out the back window came the dog. He caught the fox and returned it to the car like that was the thing to do. He never hurt the fox. — District Game Protector D. C. Beach, Towanda.

## Slow—Beaver Dam

**MERCER COUNTY** — We have a large beaver dam located on a dead end road, just south of Mercer. The local Boy Scout Troop has established a waterfowl refuge on it. This, plus the good fishing, attracts many people and it does become quite congested at times. In fact, the Highway Department has posted the area at the beaver dam at 25 mph. I would bet this is the only speed restricted beaver dam in the state. — District Game Protector J. A. Badger, Mercer.

## When Your Time Is Up . . .

**WAYNE COUNTY** — Even the wariest of wild animals sometimes fall victim to the freak acts of nature. Eddie Rosenfeld, who lives in Damascus Township, found a dead gray fox on his front lawn one morning. Examination disclosed no disease that would account for its demise, as the animal appeared healthy with a normal coat, bushy tail, etc. There were several blades of dry grass in the animal's mouth and a slight amount of blood at the nose. Lying on the grass nearby was a dead limb six inches in diameter and several feet in length. Conclusion: The fox was hunting mice in the dead grass at the base of the tree and had apparently pounced on his victim at the same instant that he became one himself. It is estimated that the dead limb fell nearly 40 feet, striking the fox squarely on the head and killing him instantly. — District Game Protector T. W. Mechan, Honesdale.



## Thinks Big

**SNYDER COUNTY** — While parked in a wooded area on a warm afternoon, I heard an odd sound coming from the rear of the car. Suspecting some sort of wildlife, I quietly investigated. I discovered a small rabbit gnawing at my right rear tire. He seemed to be thoroughly enjoying the giant "teething ring" he had found. — District Game Protector K. W. Dale, Middleburg.



### Togetherhness

**LUZERNE COUNTY**—Deputy Carl Zekoski owns a farm near Harding in Luzerne County. Carl stated he found one woodchuck, one opossum and one porcupine living in one hole in a clover field. This is proof that living space on the Environmental Quality Index has been slipping down, as the National Wildlife Federation showed in their 1971 E.Q. Index. It is not only the troubled cities that struggle for elbow room, clean air and a quiet moment.—District Game Protector T. Vesloski, Plains.

### Rare Turtle

**LANCASTER COUNTY**—I recently had the opportunity to examine one of our rarest turtles, a Muhlenburg or bog turtle found only in eleven counties in Pennsylvania. This little turtle, only four inches long, is easily identified by the orange spot in back of each car. These little creatures are welcome to Lancaster County.—District Game Protector T. L. Fox, Ephrata.

### We Hope So, Too

**CUMBERLAND COUNTY**—Driving along a street in Mechanicsburg the other day, I noticed a new freshly painted sign depicting two children crossing the street and the caption "Dear Area, Drive Carefully." I hope the motorists heed this sign more than some of the "Deer Area" signs erected at known deer crossings.—District Game Protector J. P. Filkosky, Mechanicsburg.

### Point of View

**MONTGOMERY COUNTY**—Recently I investigated a case in which four lads, ranging in age from 16 to 19, rode around in a car at night and shot rabbits and raccoons. Due to their age, I had the parents present when I talked to the boys. One boy's father was very upset because his son is a preservationist and when hunting is mentioned in their house he expounds his theories on why nothing should be killed. The boy explained why he did this by saying, "I didn't kill anything, I just held the light—and only when the rabbits were on my side of the car." Another unusual thing about this incident was the attitude of all the parents. All four fathers said, "This is the last time my son will travel with that crowd." If their theory is correct on who is to blame, I guess it must have been the rabbits' fault for coming out of their holes that night.—District Game Protector H. T. Nolf, Telford.

### Sample GAME NEWS Copies

*Do you have a friend who is interested in Pennsylvania's outdoors but is not a GAME NEWS subscriber? Perhaps he'd like to see a copy. Send us his name and address and we'll be glad to mail him a free copy of a recent issue of the magazine. Hopefully, we'll get some new subscribers—and maybe your buddy will stop "borrowing" your copies!*





# CONSERVATION NEWS



By Ted Godshall

## Hunting Seasons and Bag Limits Established

**P**ENNSYLVANIA hunters will have their first chance ever to hunt hen pheasants, when they become legal game this year in a limited portion of the state. And for the first time since 1915 they will be able to harvest two wild turkeys during a single hunting license year, one in the fall and a second in the spring. In another major change, season limits for most small game species will give way to possession limits in 1972.

These are among changes made by the Game Commission in establishing 1972-73 hunting seasons and bag limits.

This year's regular four-week archery deer season will open on Saturday, September 30; the two-week early small game season will start on Saturday, October 14; and the four-week general small game season will begin on Saturday, October 28.

In another break with tradition, the Game Commission has established a tentative season for bears on November 20 and 21. If data collected and analyzed this summer show that a bruin season might cut into the basic breeding stock, the season may be cancelled. A decision will be announced before Labor Day.

The two-week antlered deer season will open on Monday, November 27; a two-day antlerless deer season will be held on Monday and Tuesday, December 11 and 12; and the winter small game and archery deer seasons will begin on December 26 and close on January 13.

Several other changes also were made from the 1971-72 seasonal setup.



*PGC Photo by John Kriz*

**CLIFF BURRIS of Philadelphia did well in last year's deer season, collecting this nice 7-point, 118-lb. buck in Tioga County.**

Antlerless deer license allocations for the state were lowered, the closed portion of the state during the winter archery season was eliminated, the mink and muskrat trapping season was shortened, and an extra hour was added to the daily hunting schedule during the spring gobbler season.

Most of the upper one-third of Pennsylvania does not have self-sustaining pheasant populations. For years only male pheasants have been stocked in portions of 21 northern counties. By liberating hens in this area and making them legal game, an economic saving in game farm operations can be realized.

It is apparent that season limits on small game species are virtually unenforceable, and that hunters use

these limits as goals. So the Game Commission established possession limits for small game, with the exception of turkeys and hares. Small game possession limits will be double the daily limit.

Although Pennsylvania's deer herd is growing dangerously large again in some areas, the number of antlerless licenses allocated was reduced in 1972. Since more than one antlerless license could be issued to a hunter in the past, while there will be only one to a hunter this year, the number of deer harvested should be relatively comparable in 1971 and 1972.

By law, the Commission now can open or close seasons or areas quickly, so the late archery season can be cur-

tailed in any region should weather or other conditions warrant the action.

Last year there was an especially high harvest of muskrats, and to protect the basic breeding stock a shorter season was established, beginning on Thanksgiving Day.

Since the five spring hunting seasons held thus far have not been harmful to the turkey population, and since a number of gobblers did not respond to the calls of hunters until 9 a.m. or later this year, the Commission added an extra hour to the daily hunting schedule for bearded birds in the spring. The new closing time daily will be 11 a.m., with all hunters expected to be out of the woods by noon.



**BARRY SNYDER**, above, of Exton, with his Carbon County 8-point trophy. Below, right, Robert Harvey, Elkins Park, and his 166-lb. 8-point taken in Tioga County last season.



## Letter . . .

Editor:

I just finished reading my May and June copies of *GAME NEWS*. It came as a shock to me to learn that anyone would object paying so little as \$8 for a hunting license. The amount of pleasure gained afloat or afield is certainly cheap even at the increased rate. I favor increasing the license to \$10 and reviewing the rate yearly to prevent the situation which has occurred.

Being in the military, I have received free licenses for the past 3 years. Since I can afford to give up this privilege, you will find a check enclosed for all 3 seasons. I will soon be leaving for overseas and when I return I would hate to find the "rivers empty of fish, the skies empty of birds and the hills empty of game." I live to hunt and fish in my spare time. Incidentally, I recommend that servicemen be made to pay for licenses like anyone else in view of the parity recently established between military and civilian pay. No true sportsman would refuse to support the preservation of our wildlife.

Sincerely yours,  
Lt. Eugene R. Drum  
BOQ 6, Rm. 301  
Navy Base  
Charleston, S. C. 29408



# Pennsylvania Seasons and Bag Limits 1972-1973

The Pennsylvania Game Commission, in Harrisburg on June 1, 1972, established the following seasons and bag limits for resident game and furbearers for the 1972-1973 hunting license year which begins September 1.

Open season includes first and last dates listed, Sundays excepted, for game. The opening hour for small game, migratory game birds and other wild birds or animals on October 28 will be 9:00 a.m., D.S.T. Shooting hours for other days and seasons will be from one-half hour before sunrise until sunset except raccoons which may be hunted any hour and turkey gobblers (spring season) from one half hour before sunrise until 11:00 a.m., D.S.T. Shooting hours for migratory birds will be announced later.

## SMALL GAME

Daily Limit	Possession Limit		DATES OF OPEN SEASONS	
			First Day	Last Day
6	12	Squirrels, Gray, Black and Fox (combined) .....	Oct. 14 .....	Nov. 25 AND
			Dec. 26 .....	Jan. 13, 1973
2	4	Ruffed Grouse .....	Oct. 14 .....	Nov. 25 AND
			Dec. 26 .....	Jan. 13, 1973
4	8	Rabbits, Cottontail .....	Oct. 28 .....	Nov. 25 AND
			Dec. 26 .....	Jan. 13, 1973
2	4	Ring-necked Pheasants, males only (except in designated area) <sup>o</sup> .....	Oct. 28 .....	Nov. 25
4	8	Bobwhite Quail .....	Oct. 28 .....	Nov. 25
Unlimited		Raccoons (hunting or trapping) .....	No close season	
Unlimited		Woodchucks (Groundhogs) .....	No close season	
Unlimited		Squirrels, Red .....	All months except Oct. 2-13 incl.	

Daily Limit	Season Limit			
1	1	{	Wild Turkey—Counties, and parts of, listed below <sup>oo</sup> .....	Oct. 28 .....
				Nov. 25
			(Except Nov. 20 & 21)	
1	1	{	—Counties, and parts of, not listed below .....	Oct. 28 .....
			—Spring Gobbler Season (bearded birds only) .....	Nov. 18
2	4		Hares (Snowshoe Rabbits) or Varying Hares .....	May 5 .....
				May 19, 1973
				Dec. 26 .....
				Dec. 30

## BIG GAME

1	1	{	Bear, over 1 year old, by individual or by hunting party of two or more. Tentative—confirmation by Sep. 4. ....	Nov. 20 .....
				Nov. 21
			Deer, Archery Season, any deer—Statewide .....	Sep. 30 .....
				Oct. 27 AND
				Dec. 26 .....
				Jan. 13, 1973
1	1	{	Deer, Antlered, with 2 or more points to an antler or a spike 3 or more inches long .....	Nov. 27 .....
			Deer, Antlered and Antlerless, with required antlerless license, buckshot only in Special Regulations Area listed below <sup>ooo</sup> .....	Dec. 9
			Deer, Antlerless—Statewide .....	Nov. 27 .....
			—Counties, and parts of, listed below <sup>oooo</sup> .....	Dec. 9
				Dec. 11 .....
				Dec. 12
				Dec. 11 .....
				Dec. 16

## FURBEARERS

Unlimited		Skunks and Opossums .....	No close season	
Unlimited		Minks .....	Nov. 23 .....	Jan. 21, 1973
Unlimited		Muskrats (traps only) .....	Nov. 23 .....	Jan. 21, 1973
8	8	Beavers (traps only)—Counties of Susquehanna and Wayne .....	Feb. 3 .....	Mar. 18, 1973
3	3	Beavers (traps only)—Remainder of State .....	Feb. 3 .....	Mar. 4, 1973

NO OPEN SEASON—Cub Bears, Elk, Otters, Hungarian Partridges, Sharp-tailed Grouse, Bobcat or Wildcat.

NO CLOSE SEASON—Chukar Partridges.

## SPECIAL REGULATIONS

<sup>\*</sup>Designated Area for Hen Pheasants—North of Interstate Route 80 east from the Ohio line to the junction of Route 220. Thence north of Route 220 to the junction of Route 118. Thence north of Route 118 and 415 to the junction of Route 309. Thence north and east of Route 309 to the junction of Interstate Route 80. Thence north of Interstate Route 80 to the New Jersey line.

<sup>\*\*</sup>Wild Turkey Season Oct. 28 to Nov. 25 (except closed Nov. 20 and 21), in the Counties of Cameron, Clinton, Elk, Lycoming, McKean, Potter, Sullivan, Tioga, Union, and in those parts of Warren and Forest Counties east of Route 62, and in that part of Venango County south and east of the Allegheny River and north and east of

Route 322, and in those parts of Clarion and Jefferson Counties north of Route 322, that part of Clearfield County north of Route 322 from the County line east to Luthersburg, from Luthersburg to Grampian north and east of Route 219, from Grampian to Clearfield north of Route 879, from Clearfield to Philipsburg north of Route 322, that part of Centre County east of Route 322 north of Philipsburg and east of Route 350 south of Philipsburg, that part of Blair County east of Route 350, that part of Huntingdon County east of Route 350 north of Water Street and north of Route 22 east of Water Street, that part of Mifflin County north of Route 22 west of Lewistown and north of Route 522 east of Lewistown, that part of Snyder County north of Route 522, and those parts of Northumberland, Montour, Columbia, Luzerne, Wyoming and Bradford Counties north and west of the North Branch of the Susquehanna River.

\*\*\**Special Regulations Area*—Only buckshot and bow and arrow may be used for taking deer. The use or possession of single projectile ammunition (except arrows) or the use or possession of rifles or handguns discharging a single projectile while hunting or trapping at any time is prohibited in that part of southeastern Pennsylvania bounded by the following: Beginning at Washington Crossing on the Delaware River, west on Route 532 to Legislative Route 09034 (Bristol Road), north on Legislative Route 09034 to Route 611 (Easton Road) at Warrington, south on Route 611 to Legislative Route 09033 (County Line Road), north on Legislative Route 09033 to Route 309 at Line Lexington, north on Route 309 to its junction with Route 113, southwest on Route 113 to the Schuylkill River, northwest along the Schuylkill River to Route 100 (south of Pottstown), and south on Route 100 to the Pennsylvania line.

\*\*\**Antlerless Deer Season*—Dec. 11 to Dec. 16 in the Counties of Chester, Delaware and Montgomery, and in that part of Berks County south of Route 22, and that part of Bucks County within the Special Regulations (Buckshot) Area.



**BOB ZIMMERMAN**, of Paradise, with 4-point, and Gary Zimmerman, Gettysburg, and his big 10-point. Below, Bob Frantz, Carlisle, and his Cumberland County 8-point taken on South Mountain.



**ART VIOLA**, above, of Philadelphia, and his 6-point from Sullivan County taken in 1971. Walter Berg, below, Philadelphia, and his big 8-point trophy from Bradford County.





## Resident License Fees Rise

**T**HE 1972-73 hunting license fees for most Pennsylvania residents will be increased under legislation recently approved and signed into law by Gov. Milton J. Shapp.

This year there will be three resident hunting licenses, replacing the two licenses which have been in existence in the commonwealth since 1963.

A hunting license this year for youngsters 12 through 16 years of age at the time they purchase their licenses will cost \$4.20. From 1963 un-

til 1971 the fee was \$3.20.

An adult resident hunting license for sportsmen 17 through 64 years of age on the date of the license purchase will cost \$6.70. From 1963 until 1971 the fee was \$5.20.

A new hunting license was created for senior citizens 65 years of age and older. It will sell for \$5.20.

More than a year ago the Game Commission asked the legislature to increase the junior resident fee to \$5.20 and the adult resident fee to \$8.20.

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## *Triple Trophy Award Discontinued*

**T**HE PENNSYLVANIA Game Commission has eliminated its Triple Trophy Award program.

The Triple Trophy Award had been made available to hunters who bagged a wild turkey, a black bear and an antlered whitetailed deer during a single hunting license year. This was one of the state's most coveted outdoor sports awards in the time this was in effect.

Since the program was initiated in 1966, the philosophy of bagging game as the principal value of hunting is in the process of change.

The Game Commission also feels

that there should be no incentive for additional hunting pressure on the black bear. There is a strong feeling that the Triple Trophy program has brought about added pressure, as the bear is the most difficult to obtain of the three trophies needed to qualify for the award.

In addition, some hunters have resorted to illegal acts and unsportsmanlike conduct to qualify for the highly esteemed trophy.

Those who qualified for the award during the 1971-72 hunting license year will receive their certificates and brassards.

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## Ohio Dog National Retriever Champion

A 6-year-old male Labrador retriever from Ohio is the 1972 National Amateur Retriever Club champion. The dog, River Oaks Corky, is owned by Michael R. Flannery of Hudson, Ohio, past president of the National Amateur Retriever Club. The winner earned his honors in 10 exhaustive land and water tests held recently at the Pennsylvania Game Commission's Pymatuning Waterfowl Area in Crawford County. It was the first time the championship stake was held Pennsylvania.

# Antlerless Deer Licensing Changed

A RECENT amendment to the Game Law will result in a significant change in plans for issuance of 1972 antlerless deer licenses in Pennsylvania.

At the June meeting of the Pennsylvania Game Commission, new rules and regulations, directions and guidelines for issuance of antlerless deer licenses were adopted. Under the program, half of each county's allocation of antlerless licenses was earmarked for residents of the county and the other half of the licenses was designated for non-county residents.

Under provisions of Act No. 170, passed by the state legislature July 1 and signed by Governor Milton J. Shapp on July 6, all antlerless deer licenses "shall be issued without restriction or regard to the county residence of the Pennsylvania applicant."

The amendment, which was tacked onto a bill to increase resident hunting license fees, in effect cancels the Game Commission's plans to issue antlerless licenses under a setup designed to produce a more nearly equitable distribution of the licenses to our sportsmen.

The Game Law change does not alter a recent Commission regulation which provides one official antlerless deer license application form with each hunting license, and hence a hunter can obtain only one antlerless license.

Under the Pennsylvania Game Law, no applications for antlerless deer licenses received from nonresidents of Pennsylvania and aliens may be approved or licenses issued in advance of 30 days prior to the opening of the antlerless deer season.

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## PENNSYLVANIA GAME COMMISSION

### SUMMARY

#### 1972 SEASONS AND BAG LIMITS

#### DOVES, RAILS, GALLINULES, SNIPE, WOODCOCK

Species	Open Seasons		Daily Bag Limits	Maximum Possession Limits
	First Day	Last Day		
Doves	Sept. 1	Nov. 9	12	24
† Rails (Sora and Virginia)	Sept. 1	Nov. 9	25*	25*
Gallinules	Sept. 1	Nov. 9	15	30
Wilson's or Jacksnipe	Oct. 14	Dec. 16	8	16
Woodcock	Oct. 14	Dec. 16	5	10

† NO OPEN SEASON—King and Clapper Rails.

\* Singly or in the aggregate of species.

#### SHOOTING HOURS

Doves—12 noon, prevailing time, to Sunset.

Rails, Gallinules, Snipe, Woodcock—One-half hour before Sunrise to Sunset (except on October 28 when the opening hour will be 9 a.m.)

#### MISCELLANEOUS REGULATIONS

FEDERAL MIGRATORY BIRD HUNTING STAMP ("DUCK" STAMP) **NOT REQUIRED TO HUNT DOVES, RAILS, GALLINULES, SNIPE, WOODCOCK. BOW AND ARROW, SHOTGUN PLUGGED TO NO MORE THAN 3-SHELL CAPACITY ARE LEGAL; RIFLES AND PISTOLS ARE PROHIBITED. NO HUNTING ON SUNDAY.**



# Game Commission Declares Two-Day Antlerless Deer Season—December 11 and 12

The Pennsylvania Game Commission, by resolution adopted at its meeting on June 1 in Harrisburg, declared a two-day statewide open season on antlerless deer.

Hunters participating in the antlerless deer season must possess an antlerless deer license for the county in which they are hunting in addition to the regular hunting license. One antlerless deer license application will be issued with each license. Antlerless licenses are available from County Treasurers *ONLY*. *DO NOT MAIL APPLICATION TO PENNSYLVANIA GAME COMMISSION OR DEPARTMENT OF REVENUE, HARRISBURG.*

Only hunters who have not already harvested a white-tailed deer and who possess an antlerless license may legally harvest an antlerless deer. Antlerless deer are those animals with no visible antlers, regardless of sex.

In a specially designated area of southeastern Pennsylvania, the antlerless season extends from December 11-16.

In the Special Regulations (Buckshot) Area, antlerless deer may be taken during the regular statewide buck season if the hunter possesses an antlerless deer license.

County antlerless license allocations are as follows:

## ANTLERLESS DEER PERMIT ALLOCATIONS

<i>County</i>	<i>County Seat</i>	<i>No. of Licenses</i>	<i>County</i>	<i>County Seat</i>	<i>No. of Licenses</i>
Adams	Gettysburg	3,150	Lackawanna	Scranton	3,750
Allegheny	Pittsburgh	4,150	Lancaster	Lancaster	2,450
Armstrong	Kittanning	4,500	Lawrence	New Castle	2,650
Beaver	Beaver	2,800	Lebanon	Lebanon	2,500
Bedford	Bedford	8,350	Lehigh	Allentown	1,550
Berks	Reading	4,750	Luzerne	Wilkes-Barre	7,200
Blair	Hollidaysburg	5,450	Lycoming	Williamsport	9,000
Bradford	Towanda	9,000	McKean	Smethport	8,500
Bucks	Doylestown	2,700	Mercer	Mercer	3,200
Butler	Butler	5,600	Mifflin	Lewistown	3,250
Cambria	Ebensburg	6,150	Monroe	Stroudsburg	5,200
Cameron	Emporium	2,050	Montgomery	Norristown	1,900
Carbon	Jim Thorpe	5,000	Montour	Danville	1,100
Centre	Bellefonte	7,750	Northampton	Easton	1,950
Chester	West Chester	3,000	Northumberland	Sunbury	3,100
Clarion	Clarion	4,700	Perry	New Bloomfield	5,600
Clearfield	Clearfield	7,200	Philadelphia	Philadelphia	---
Clinton	Lock Haven	4,900	Pike	Milford	2,650
Columbia	Bloomsburg	3,450	Potter	Coudersport	8,250
Crawford	Meadville	5,000	Schuylkill	Pottsville	6,850
Cumberland	Carlisle	3,350	Snyder	Middleburg	1,950
Dauphin	Harrisburg	3,150	Somerset	Somerset	5,450
Delaware	Media	300	Sullivan	Laporte	4,200
Elk	Ridgway	4,800	Susquehanna	Montrose	4,150
Erie	Erie	5,400	Tioga	Wellsboro	8,050
Fayette	Uniontown	4,100	Union	Lewisburg	2,150
Forest	Tionesta	4,700	Venango	Franklin	7,300
Franklin	Chambersburg	3,850	Warren	Warren	7,650
Fulton	McConnellsburg	3,900	Washington	Washington	4,900
Greene	Waynesburg	2,000	Wayne	Honesdale	4,100
Huntingdon	Huntingdon	8,450	Westmoreland	Greensburg	5,600
Indiana	Indiana	5,300	Wyoming	Tunkhannock	3,300
Jefferson	Brookville	5,200	York	York	3,750
Juniata	Mifflintown	4,900			
TOTAL					302,250

# Small Game Harvest

By William K. Shope  
PGC Wildlife Biologist

THE Pennsylvania Game Commission initiated a small game-take survey following the 1971-72 hunting season. It was designed to improve the accuracy of harvest estimates and to provide information on the distribution of harvests and hunting pressure. This article is a brief report on the findings of that survey.

Hunters contacted for the survey were drawn at random from the 1970-71 hunting license list. A total of 39,500 hunters received questionnaires which asked them to list the numbers of rabbits, grouse, pheasants, woodcock, squirrels, turkeys, quail and doves harvested, the counties in which they hunted, the number of days spent hunting each species, and whether they hunted during the early, regular or extended small game seasons and in the 1971 spring gobbler season.

Of the 39,500 hunters contacted, 29% returned completed questionnaires. Ninety-seven percent of the respondents indicated they hunted small game during the 1971-1972 season. Based on the reported harvest of the small game hunters, an average kill per licensed hunter was computed for each of the species and multiplied by the number of hunting licenses sold through March of 1972 to obtain a statewide harvest estimate for each species. The estimated harvest for each species and the average number of trips afield by a hunter pursuing that species are shown in Table 1.

The respondents among the small game hunters also indicated that 98% hunted during the regular season, 50% during the early season, 38% during the extended season, and 17% during the spring gobbler season. More small game hunters hunted rabbits (79%) than any other species, but ringnecks ran a close second (76%), followed by squirrels (51%), grouse (44%), turkey (41%), woodchuck (28%), woodcock (13%), dove (10%), and quail (1%).

Information obtained on surveys such as this one provide facts important to the sound management of wildlife resources. Data on harvests provide a useful method for monitoring changes in game populations, and such data are necessary to protect and preserve Pennsylvania's wildlife resources for the future. I wish to thank those individuals who returned questionnaires for their participation and interest in this wildlife resources program.

Table 1.

Species	Estimated Harvest	Number of Hunting Trips Per Hunter
Rabbits	2,727,744	6.06
Grouse	355,417	5.20
Pheasants	1,322,675	5.27
Woodcock	357,341	5.81
Squirrels	2,545,555	4.86
Turkey	43,927	3.57
Quail	50,311	5.41
Dove	1,031,129	7.45

## No Market Hunting

Congress ended market hunting in 1900 with the passage of the Lacey Act, a measure sponsored by the nation's sporting hunters.





THE CAMPGROUND VISITED BY THE Rountrees is located on a picturesque stream with a swimming hole for the youngsters.

**Campers . . .**

## *Head for the Farm*

By Les Rountree

**W**ANT TO TRY something different before this year's camping season is over? How about a visit to a working farm—that is, a real farm that caters to campers and allows the children and their parents to take part in the farm activities. Might not sound like a big deal to those of you who grew up in a rural atmosphere, but I can assure you a whole pile of campers out there will find this sort of a campground a brand-new adventure.

The modern trend in agriculture is toward bigger and more businesslike farms. But there are still thousands of small farms across Pennsylvania whose owners like the pace and self reliance that running your own spread offers. Trouble is, operating a small farm can be a very "iffy" business from a financial standpoint. Too much rain, or more frequently too little, can wipe

out the expected profit, and it can be a long hard winter until next year's planting time rolls around. Several hundred farmers have found a way to supplement their incomes and have a good time doing it. They've started on-the-farm campgrounds, or in more cases take vacationers right into their homes for a real down-on-the-farm adventure.

Many of these farm campgrounds are operated just like any other private camping area, but the ones that interested me the most were listed in the "Farm and Ranch Vacation Guide." Published every two years by Farm and Ranch Vacations, Inc., 36 East 57th Street, New York, N. Y. 10022, this guide to farms and ranches and working farm campgrounds offers fascinating reading . . . even if you don't intend to give it a try. The book-

let sells for \$2.50 and lists farms and ranches all over the nation that accept guests. It provides a complete run-down on prices, local attractions, activities and some intimate notes about kinds of food served and quotes from guests who have stayed at the particular farm in question.



**MRS. MACKEY** registers a new camper at Twin Bridge Meadow Family Campground, near Chambersburg in beautiful southcentral Pennsylvania.

These farm campgrounds have been around for some time, but much to my surprise I discovered that I didn't really know a great deal about them. To rectify this gap in my education, my wife and I paid a visit to Twin Bridge Meadow Family Campground. It's located between Chambersburg and Fort Loudon, just off U. S. Route 30 (RD 4, Chambersburg, Pa. 17201). No particular reason why we chose this dairy farm . . . although I do like to fish and it just happened that a trout stream runs through the campground!

As we rounded the last bend on the way to the farm, my feelings were reconfirmed that we must live in the prettiest state in the nation. South-

central Pennsylvania in the summertime, or anytime for that matter, is pure calendar art. Neat brick and frame farmhouses, sparkling white board fences and fat, healthy cattle make me feel a bit sorry for the rest of the underprivileged people in the world. Add this gentle landscape to the Poconos, the Allegheny Mountains, the Laurel Highlands and the three great river valleys of our Commonwealth and it's an unbeatable combination. But, I digress poetically!

### Friendly Farm Folk

Wilbur and Florence Mackey are friendly farm folk. They love their farm and take great pride in keeping it neat and orderly. They also love people, especially children. Mrs. Mackey admits that operating a campground with 50 sites adds considerably to their farm income, but she also agrees that anyone in the campground business must enjoy people and be willing to put up with some inconveniences.

Included in the camping fee of \$2.50 a day (hook-ups are extra), campers' children are encouraged to feed the lambs with a milk bottle, milk cows (how many kids know how to do that today?), groom and saddle the ponies and horses and wander around the farm at will. There are dogs and cats and a hay ride almost every evening. The only thing that costs extra are the horse and pony rides and the miniature golf course. The latter is the Mackeys' one concession to modern activities.

"Pennsylvania Farmer Magazine" gave them the idea in the first place. The magazine had featured a story about other farmers who were taking paying guests into their homes, and





the Mackeys thought they would go one step further and build a campground. This is their fourth year of operation and they have just finished turning one floor of their barn into an indoor recreation room for rainy days.

There's no question about it, the Mackeys' farm campground is children oriented. I've badgered parents a number of times in this column about taking their young children camping and offering them nothing more to do than swimming and wandering around the camp sites, and it won't hurt to do it again. Kids can get pretty bored after one day at a "peaceful" ordinary campground. We adults can enjoy several days of doing nothing in particular but not the youngsters. Their adrenaline is pumping all the time and they need something to do!

At a working farm there is always something to do and see. In talking with other guests we discovered their amazement when they told us how their 12-year-old boy couldn't wait to get up in the morning so he could help out with the farm chores. This same boy, they admitted, found it a great struggle to pick his soiled socks off the floor when they were back home. Adults too, particularly the city-bred variety, find that being close to a real honest-to-goodness producing farm can be an educational experience. Supermarket produce takes on a different look when you know what's involved in getting it there.

#### **Room for Private Development**

While I still strongly believe that the big surge in supplying more camp sites for the increasing number of travelers is up to the state and federal governments, there is plenty of room for more private development. Especially the farm operated campground. There are some insurance problems and not all farms have an acceptable area for such a campground, but I'd guess that most small farms have a five- or 10-acre tract that would be



**THOUGH A LONG WAYS** from the Wild West, riding horses and ponies are available at this and many other similar camping areas in Pennsylvania.

perfect for such an operation. Sanitary facilities will probably be the largest single expense and guidelines for building an acceptable sewage system are available from the Pennsylvania Department of Environmental Resources.

The other type of farm vacation that cannot be considered real camping is the live-in accommodation offered by still more Pennsylvania farms. There are some in all sections of the state and the rich variety of ethnic backgrounds that abound here make most of these worth looking into. "Farm and Ranch Vacation Guide" lists over 30 Pennsylvania working farms that take guests into their homes or provide cottages for stays up to several weeks (many also have camp-sites). Prices vary from \$40 to \$85 per week for adults. In most cases, children are charged less. All meals and a complete run of the farm are included and if you want to help out with the chores or just sit and watch, the pleasure is yours. Most first-time guests on these farms are astonished at the quality and quantity of the food. Pennsylvania farm cooking is famous and apparently the people who take in vacationers don't want to

tarnish the image. The testimonials from guests read like a Duncan Hines rating. Homemade salad dressings, full cookie jars, home smoked meat and, of course, the very freshest of home grown vegetables all add up to a culinary treat that most city dwellers go nuts over.

With few exceptions, the people who have experienced a farm vacation have a similar comment. That is, "The host really made a strong effort to make us feel like part of the family." All meals and other activities are done family style and it's the rare guest who doesn't pitch in and help with the dishes and other farm chores after he's been there for a day or so. It's not that this is required of guests but it just seems to work out that way. I talked with an account executive for one of the big New York advertising agencies who spent two weeks at a working dairy farm in northern Pennsylvania and he was more than enthusiastic.

"It was my wife's idea," he admitted, "I thought it was a crazy one. We have two pre-teenage children and they wanted to try the farm route too. We did, and I now intend to spend

## Moving?

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every vacation that way. After two days on the farm, I found myself shoveling manure and working harder with my back and hands than I ever have in my life. I eased into the tougher jobs, however, because pushing a pencil doesn't build up very many callouses on the hands. You know what? I felt more relaxed after our farm vacation than I ever have after two weeks lolling around on the beach . . . which used to be our usual form of vacationing. And the food! I never had such a great appetite in my life. I must have consumed double the amount I would at home and I didn't gain a single pound. In fact, I lost an inch of waistline!"

I know it's an old cliché, but the back-to-nature movement has a lot

**A VISIT TO A WORKING FARM GIVES** many city youngsters a chance to see —perhaps for the first time—live animals and fish and growing crops.





going for it. The pendulum has an odd way of swinging now and then, but the skyrocketing interest in all types of camping and outdoor recreation has some solid benefits for the nation as a whole. We were once a country of farmers, hunters and trappers. We still are, just beneath the surface, and while some of us don't camp or recreate in ways that are acceptable to others, at least we're trying. I have certain misgivings about the speed with which the camping syndrome is advancing, but I honestly believe that with a little common sense we can learn to live together as campers and citizens and not destroy ourselves as some of the doomsayers are prone to wail about. It's going to take some restraint and perhaps some very tough legislation.

Along those lines, I asked Mr. and Mrs. Mackey what they liked least about running a campground. First off, they didn't like the messy camper. That's the guy who tosses his candy wrappers and used aluminum foil on the ground and drives away. Thank goodness, this character is becoming scarcer each year and with some diligent police work among campers themselves, this species will hopefully be extinct soon. The other major complaint that they voiced was about the mini-bike operators. They were not against the bike itself but the indiscriminate way that some were used. Running these loud little machines all over the farm was upsetting to the animals and the other guests. Their feeling was that a farm vacation or camping trip didn't have to be totally tranquil but a roaring mini-bike weaving around the tents and buildings was not very relaxing. I'll say amen to that. The Mackeys now have a special area just for mini-bike riding.

I'll have more to say about noisy off-the-road vehicles in a later column but I would like to stick in a thought about them right here. Most users of snowmobiles, ATVs and trail bikes are intelligent people and make a strong



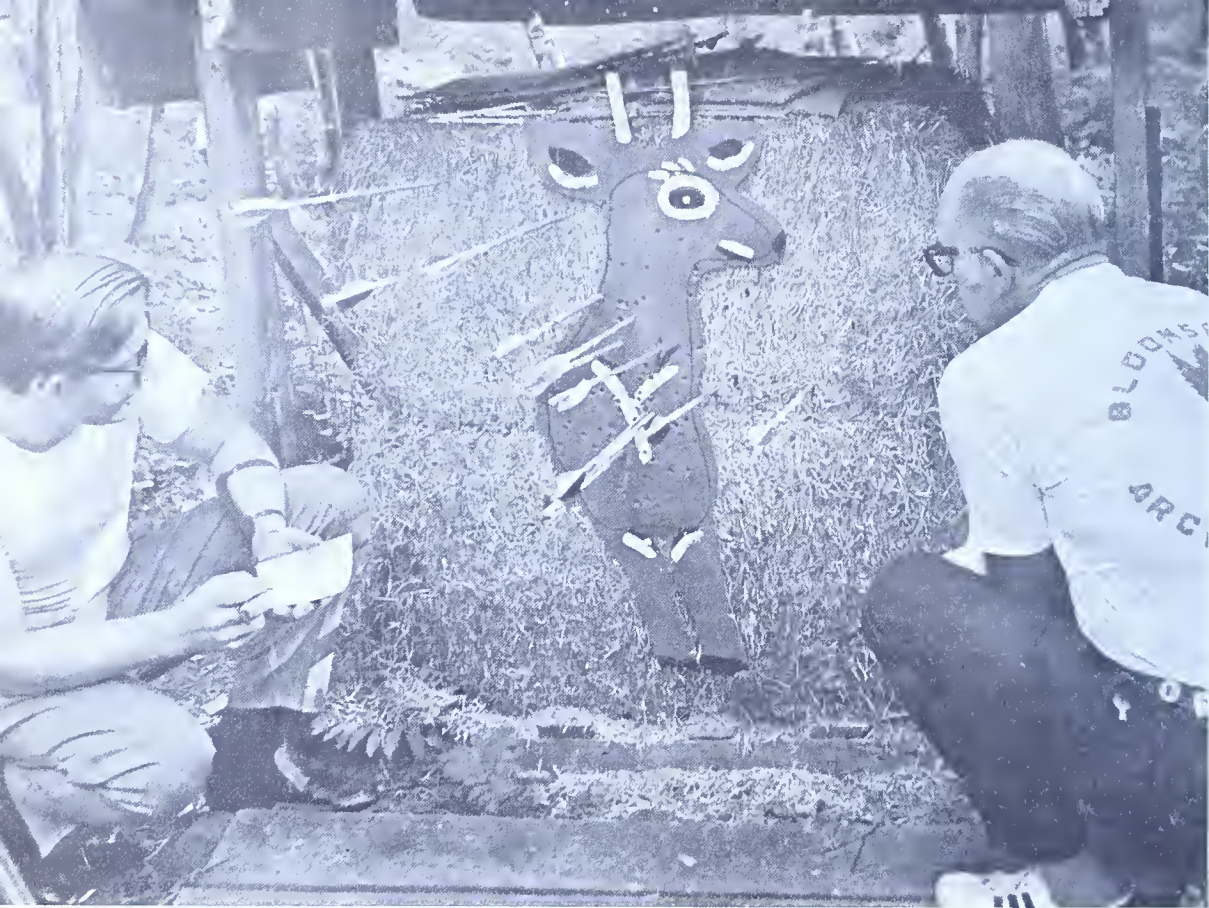
**CLEAN RESTROOMS** and showers are necessities for today's family campers. Many areas also have disposal stations for those living in trailers.

effort to ride these vehicles in out-of-the way places. Others do not. Perhaps some new, strong legislation is needed. But the biggest gripe I have with all of them is the same as Mrs. Mackey's. They're just too blamed noisy! They don't have to be. Efficient mufflers would solve 90 percent of the problem. I must also admit that I feel the same way about the neighbor who mows his lawn at 8 o'clock on Sunday morning.

Why not try a farm vacation or camping adventure this fall during the harvest time? Autumn is another one of Pennsylvania's great seasons. And *do* take along extra washable sneakers and clothes for the kids . . . you never know what they may be stepping into next when they are romping on a farm.

P.S.: I hope all of those readers who wrote to me about their difficulty in finding a Dutch oven finally located one. If you come up with some new D. O. recipes, please share them with me.





**TERRY MOORE, BERWICK, and Roy Leiby, Bloomsburg, check scores at Hazelton Deer Shoot, an annual event.**

*Field Course Variety . . .*

## BETWEEN TOURNAMENTS

**By Keith Schuyler**

*Photos From the Author*

**E**VERY SPORT has its offshoot counterpart in simulation of the main game in a less formal approach. For example, there are such things as softball, touch football, street hockey, and a form of basketball which involves a single hoop stuck on the end of the neighbor's garage. Shotgun artists may settle at times for a session with a hand trap or riflemen for plinking with a 22 at a tin can set up against a bank of dirt.

These improvisations provide entertainment in between the main events or just a means of relaxation or flexing one's muscles. There is no real pres-

sure of competition and the activity is enjoyed for its own sake.

Archers are no exception. In fact, individual clubs are more and more finding that informal shoots bring out big crowds and continued interest among members between the regular tournaments. Although some such shoots follow the general rules for regular tournaments, and awards are frequently given, the accent is on fun rather than skill. This does not discount the good effects of keeping eyes and muscles toned for the formal events, but the mental strain that makes real work out of a regular



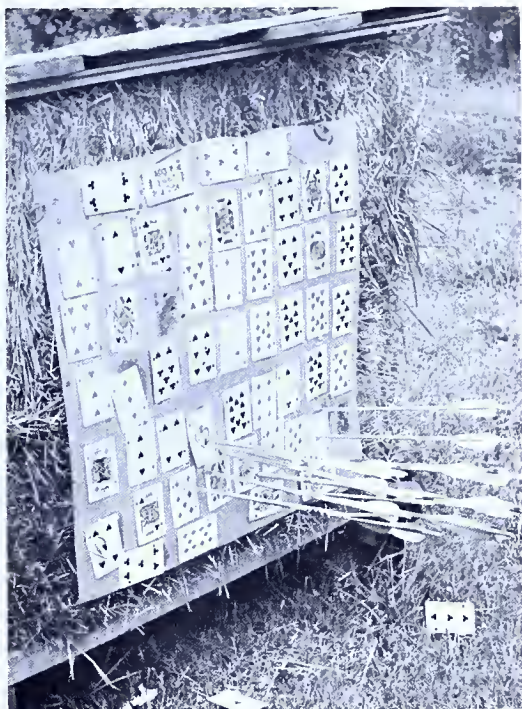
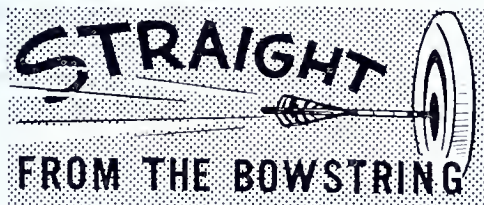
shoot is lacking. Most such shoots are shot for the fun of it.

In fact, some targets are designed to make the actual score from the hit more a matter of chance than good judgment. There is still the necessity to hit the target, which is what archery is all about, but scoring is frequently set up so that anybody who can hit the generally easier targets has an equal chance to win.

Not only does it give the regulars who attend the summer conference shoots a time to relax, it provides enough challenge and entertainment to bring out those who don't go in for formal target shooting. A not inconsiderable plus value is the extra money that can be earned by utilizing a Sunday when there are no regular tournaments in the conference. Larger clubs can have such shoots every weekend to accommodate those who do not follow the tournament circuit. In this way, archery offers something for everyone in the individual club.

There are almost limitless ideas which can be put to good use in these shoots. One club which goes in for such shenanigans in a big way is Hazleton Archery Club, which has an excellent field course near Freeland. Some of the photos here came from two regular shoots conducted by the highest city in Pennsylvania's club. One is a deer shoot and the other is a novelty event.

The deer shoot is held in late summer to provide practice for the upcoming hunting season. Targets are cardboard cutouts which more or less resemble a complete deer or the forward part of one. Each target has the scoring area marked on it, and all hits count. Different shooting stakes than those utilized at regular shoots are



**ENDLESS GAMES** can be dreamed up to vary the pace in bow shooting. This one utilizes a deck of cards as targets, introduces an element of luck.

placed prior to the event so that field conditions are simulated as much as possible. For variety, at one target there is a raised platform from which the archer must release his arrows at a full-sized deer target.

Although this is primarily a fun shoot, and many archers use their hunting tackle, the event provides excellent practice. It is truly amazing how difficult shooting at a target which has no aiming spot can be. Those who would normally punch out a good score on a regulation field target frequently fail to be impressive on such targets. It generally holds that those who do best in the regular tournament will come out on top, but occasionally surprises are produced by those who would come up with a poor total in an official shoot. Unknown distances provide the governing factor for those who perform well in this type of shooting.

Those who set up the novelty shoot frequently take fiendish delight in



**SIMULATED BOTTLES OF questionable vintage and variety keep contestants guessing while they're shooting.**

making the targets as tough as possible. To add variety, a number of the targets are animated and provide excellent practice at moving objects.

One such arrangement features two toy airplanes suspended on wires fastened to a turntable powered by a small motor. The airplanes are so constructed that they can stand quite a bit of punishment from the arrows. However, the damage they receive is usually somewhat less than that planned by the archers who shoot at them.

#### **Balloons on Turntable**

A similar arrangement is provided in another target where balloons revolve on a turntable to inject both color and animation into the target.

One of the more ingenious setups is a frog, of sorts, sitting on an artificial lily pad at the far edge of a pond on the field range. Although the frog is usually placed in a position so that arrow misses are likely to go into the opposite bank where they can be more or less easily recovered, that beat-up old frog gets moved quite a bit during the day. After a half dozen or so archers retrieve their arrows, the bank gets slippery and arrow recovery becomes increasingly hazardous to the owner.

An endless variety of ideas can be incorporated into such a course. The only real caution to suggest here is that such targets should be arranged so there is a minimum probability of arrow damage. Shots should be neither impossible nor hazardous to tackle or participants. Regular field butts can be utilized to catch misses, or if arrows are to be shot into the ground it should be free of stones. Although there should be some concession to skill, it is well to have enough targets where the score cannot be determined until arrows are actually scored. This gives the less skilled targeteers a chance to stay even with the board.

One way to provide this type of target is to use a color code. Either single spots of various colors or a pie-shaped circle with varied colors will make a good target. If possible, the circular target might be set on a shaft so that it can be spun before a shot is taken. This precludes anyone being able to determine what color he will hit in the event that the word gets around as to color values. A code on or around the target listing the point value of various colors can provide the score. This target should be short enough in distance from the shooters that the person spinning the target



doesn't have too far a walk to accomplish this and get into a safe position before the next archer releases.

Everyone is by now familiar with the three-dimensional targets which have become extremely popular, particularly in the southeast. Frontier Archery Club has what is probably the finest such course in the United States, and it is one which attracts big crowds at both of its late summer tournaments. Three such courses are laid out at Forksville for the annual Bowhunters Festival. Although piles of broken shafts at many of the difficult targets at the Forksville ranges attest to the difficulty of hitting life-size foxes, raccoons, turkeys and such, it doesn't discourage participation. There are always long lines waiting at all three 14-target courses. These regulated roving courses are becoming increasingly popular across the country, particularly prior to the big game bow hunting season.

The fascination of shooting at simulated animals, birds and anything else that can be reasonably duplicated in styrofoam brings on those who may not be interested in hunting live creatures. Women and children crowd such courses and groups are frequently family affairs.

### Plenty of Games

Novelty targets and events are not necessarily confined to field courses. Nor are they held only as a full-blown event in themselves. Plenty of individual games can provide entertainment for archers and income for the club.

Accompanying this column is a photo of a playing card game that offers anyone who can hit the target a chance to win. Any number up to five arrows, depending upon the number of participants in one game, can be permitted for scoring. The only essential is that the scorer know the card combination values for a regular poker game. Normally, it is best to separate the sight shooters from those

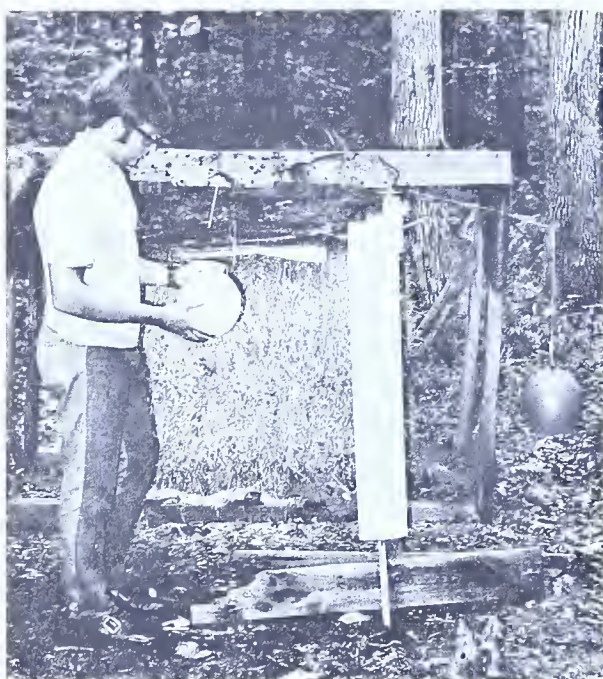
not using sights for such games, as the advantage of one over the other is obvious.

The biggest problem in setting up such a target is in providing that the playing cards will stick to the back-drop. A large piece of flat cardboard is fine for attaching the cards, but glue will not stick well to it. This is particularly true when arrows are removed. Probably the best way is to staple the cards fast to the cardboard. In no case should the cardboard backing be larger than the butt to which it is attached. If it is, there will be frequent pass-throughs and possible lost or broken arrows.

An event which has proven popular at Frontier Archery Club, near Pottstown, is an arrangement whereby a ping-pong ball is supported on a stream of air. Last year our local club did well with an animated target on which two turkeys made a fast circuit.



**HENRY REICH, Hazleton, levels down on flying airplane, angling to drive his arrow through target and into straw butt which is off camera.**



**BALLOONS ALWAYS** make fascinating targets. On arrangement shown here, balloons move on an electrically powered turntable for tricky shooting.

The styrofoam copies paid for themselves as the challenge of shooting at a moving target kept competitors coming.

These games can be set up as an adjunct to a regular tournament. They provide activity for the early comers and those who stick around after the shoot to hear the final scores. Such games can be shot on a 50-50 basis with the winner and the club dividing the entry fees, which should be kept modest, or any pro-rata arrangement can be worked out in advance.

The most important factor behind this scene is merely one of sustaining interest in archery. It is no secret to anyone who has been there why the Bowhunters Festival still ranks as the biggest participating event for archers anywhere in the world, despite the fact that it is necessary to search the map to find the tiny village of Forksville. Participation has averaged well over 2000 archers for the past several years. Yet no prizes are given and no scores kept, with the exception of the

running deer contest, a special Sunday team feature. All else is simply an optional opportunity to shoot at animated and still targets of styrofoam which simulate wild creatures. Groundhogs which pop up from behind bales of straw, foxes and raccoons which run across an opening on a belt, flying ducks, whirling balloons, and the running deer itself are what bring the archers out for this annual three-day event.

More and more clubs are utilizing this and similar attractions to gain and maintain membership. Old washing machine motors and other second-hand appliances can be used to provide animation. Styrofoam targets which simulate actual wild creatures are expensive to buy but relatively easy to make for those with the time to put into the task. There are no seasons or season limits for such "game." Even hunting critics can find no fault with such forms of entertainment. And collectively it is just one more way that the bow and arrow can be utilized for pure pleasure.

#### **Surefire Attraction**

Where space is available, and the stunt can be promoted with complete regard to safety, aerial shots are a surefire attraction. Except in the rare setup where a high bank fairly free of stones can be used to collect spent shafts, use of flu-flu arrows is almost a necessity. Since not every archer has a collection of these die-easy arrows, it is well to have a supply on hand.

A number of aerial targets can be utilized for such events. Clay pigeons can be thrown from a hand or a portable trap. The latter is better, as releases will be more uniform. It is unlikely that two archers will hit simultaneously, so as many competitors as practical for the space available can be sent to the line. The economy of this is obvious.

A commercial target shaped somewhat like a flattened Boy Scout hat is available for hand throwing. It will



sail a considerable distance. Arrows which strike are likely to remain in the target. To avoid questions over pass-throughs, it is well to tape each hole after a hit is scored.

Still another idea entails the use of gas-filled balloons. These can be tied to a stake in a manner which permits a cord to the shooting line to release the balloons. Of course, missed targets will be obvious. If there is any question of safety in the event the wind shifts and carries the balloons toward a hazardous area, this problem can be solved by limiting permissible shooting time with a stop watch. A time limit might be advisable in any case.

Flu-flu arrows, for the most part, are difficult to make fly properly, but since it is all in fun and everybody has the same handicap, there will be few gripes. (Incidentally, flu-flus can ruin a delicate arrow rest because of the extended fletching.)

These are merely samples of what is being done and what can be done. A bit of imagination can undoubtedly produce many more ideas which will be welcomed as a break in the standard program of busting bullseyes.

There is no intent here that such activities should take the place of formalized competition, but you can provide a pleasurable interlude in between tournaments or as a side event to attract and hold the interest of archers everywhere.

The accent here is on activities which can be coordinated with or staged in lieu of regular tournaments,



but they are not confined to shirt-sleeve months. Archery lane operators might give some thought to varying their indoor programs with something along these lines. Plenty of opportunities exist at the usual 20-yard distances to mix things up a bit. We will have something in this column later about this subject.

Formalized competition has been largely responsible for the establishment of archery ranges both outdoors and on the inside, and continued consideration must be given to those who have made them possible. However, those responsible for keeping things moving might be amazed at the interest generated among even those who belong primarily to the pull-and-pray category. It is almost certain that those who stand along the sidelines will be tempted into trying anything that *looks* so easy.

One thing is certain. Any activity which keeps them shooting justifies its own existence.

---

### **Only 81% of Hunters Reported Deer Kills**

A Game Commission study shows that in 1971 only 81 percent of successful deer hunters reported their deer harvests as required by law. The percentage was exactly the same in 1970. Last year, 104,227 hunters reported taking deer in the state, but the study indicates that about 128,675 actually harvested whitetails.



# The Heavy-Barrel Varmint Rifle

by Don Lewis

*Photos by Helen Lewis*

**HEAVY BARREL, THUMBHOLE** stock and varmint scope are typical features of a rifle designed and built to obtain the greatest possible chuck shooting accuracy.

I STARED WITH disbelief at the three groups on the target 100 yards away. Either I was a very poor bench shot or else I had the world's worst 220 Swift. The best of the three measured over two inches according to the calibrated lines on the target. I just couldn't accept the fact that this rifle was so bad, and I left the bench-rest and went back to my loading bench and cranked out 10 carefully measured rounds. To make certain I wasn't the culprit, I called my wife, Helen, to fire the two 5-shot groups. When she failed to get below 1½ inches, I came to the conclusion it must be the rifle.

The year is not important, but this particular episode took place shortly before Winchester introduced its heavy-barrel Model 70 varmint rifle.

Prior to the Model 70's appearance, heavy-barrel bench and varmint rifles were custom-made by gunsmiths and could not be purchased over the counter. The Swift I was shooting was a heavy barrel built on a Mauser 98 action. Its appearance gave the impression that it could drive tacks at 200 yards. A beautiful bluing job, jeweled bolt handle, and some of the sharpest checkering I had ever seen, along with a superb double set trigger, put this rifle in a special class—and the price its owner was asking made it very special. I still believe it was the best looking rifle that ever passed through my hands.

This 220 Swift stood for everything I had dreamed of in a varmint rifle. For years, I had been a strong advocate of the 220 powerhouse, and this



decked out beauty really set my wheels spinning. I hit high gear when I scoped it with a fine 10X Unertl. The fact that I was more than willing to trade several fine varmint guns plus all the money I had in the tea pot indicated just how much I wanted the rifle.

Probably one of the smartest moves I ever made came about when I suggested trying the rifle from the bench before buying it. Either its owner had never fired the rifle or didn't know how to group shoot it, or else he didn't know how a fine varmint rifle should shoot, for he willingly agreed to my terms and assured me I would never bring the rifle back. Although I went as far as I could with a rifle that didn't belong to me, there was no improvement in the rifle's grouping ability. I believe the man who owned the rifle thought I just couldn't come up with the money when I gave it back.

Of all the rifles I've handled and shot, this rifle's performance was the biggest disappointment for me. Ordinarily, I am not much impressed with the looks of a rifle. To me, a good rifle is an accurate rifle, and my affection and admiration ends about there. However, for some reason, this one rifle did get to me and had a special appeal. There was something about the way it was stocked, along with its sleek looks, that swept me off my feet. But it proved looks are not everything.

The benefits from the heavy barrel have been known for years by benchrest and long-range varmint shooters, but it is taking more time than it should to convince the average chuck hunter. Even the arms manufacturers were slow getting into the act. In all fairness to the manufacturers, it should



**SOME PETS OF LEWIS:** Ruger No. 1 and Redfield 3200 12x scope; Mossberg M800, Tasco 6-18x; and Browning Safari carrying 20x Redfield. All have barrels on the heavy side, for ease of holding and top accuracy, though none is of bull barrel weight such as benchresters use.

be pointed out that during the late '40s and early '50s varmint hunting was not done on the scale it is today. Secondly, handloading was just catching on and home fodder has a way of creating more shooting, which necessitated a lot of benchrests being built. It wasn't long before the need for a more accurate outfit convinced the new handloader a heavy barrel was needed.

I remember well when the first Winchester M70 heavy barrel 243 hit our town. The date isn't important, but I do remember I was offered the chance to purchase it. Money being scarce, I was forced to pass the deal along to another anxious varmint hunter, but I had little rest until I had me a new



Winchester. I slapped a 24X Unertl target scope on it and went to work loading and shooting. The lack of an adjustable trigger kept me from cutting one-holers, but the rifle shot well, and later I collected a large number of chucks beyond 250 yards.

During this period, chuck hunting was still thought of in terms of 150 to 175 yard shots. The 22 Hornet left an impression that was hard to erase. Most big game hunters were not aware of the enjoyment and side benefits varmint hunting offers, and there was no strong demand for super-accurate equipment. With no pressure on the gun companies to produce rifles that gave consistent minute-of-angle and less groups, the transition from the hunting rifle to the heavy barrel took too much time.

The heavy barrel was a complete stranger in the hunting fraternity and just its looks were enough to keep most hunters a respectable distance

from one. As usual, the lack of knowledge about the advantages the thick barrel had to offer caused a number of new varmint hunters to steer clear of what they referred to as the heavy beasts. With this type of thinking dominating the hunting scene, the heavy barrel was a long time in winning many friends.

#### **Almost No Taper**

The original heavy-barrel outfits such as the Swift I mentioned earlier were true heavy barrels, for there was almost no taper from the receiver to the muzzle. The drawback with this type of rifle was its length and weight. It was nearly impossible to carry one any distance. No hunter wants to lug a 14-pound chuck rifle very far. It's easy to see why the old style heavy barrel got off to a slow start.

Fortunately, there is no need for the 30" barrel with no taper, so far as chuck hunting is concerned. The benchresters will probably stick with the extra thick barrel, but the 24" lightweight barrel will do the job for today's varmint hunter. Many versions of the heavy barrel are available today, and the hunter can have a choice from  $\frac{7}{8}$ " to  $\frac{5}{8}$ " at the muzzle. I have found the thicker barrels easier to hold on the long shots than a barrel that tapers down to  $\frac{5}{8}$ ". I have no objections to carrying an extra pound of barrel weight when I know that it will be to my advantage on the extra long shots, especially from the sitting position.

In case there might be some confusion as to why a heavy barrel is needed in the first place, I want to emphasize that accuracy stems a good bit from barrel stability. All barrels vibrate. No barrel is free from some vibrations as the gases and bullet pass through it. The barrel with extra steel in it is not as sensitive as a thinner one to these vibrations. However, I have always felt that heat is the culprit denying the thin barrel the ability to perform well. The friction and ex-



**REMINGTON M700 Varmint rifle also has heavy tube. Adjustable chuck rest is made by Anderson's, 551 Fletcher Rd., Wayne, Pa. 19087.**



cessive heat caused by the bullet and burning powder make a thin barrel bend or warp to some extent. I have fired many hunting rifles with thin barrels that shot fair groups for the first three shots, but as the barrel became overheated, the groups began to widen and bullet impact became erratic.

Some years ago, I had a very thin barrel 257 on a Mauser action. The rifle had purposely been designed for long distance carrying and every ounce of weight that could be removed had been taken off. As a deer outfit, it was fair, but I couldn't give it away for chuck hunting. I fired every combination of powder and bullet I could dream up, but nothing improved the grouping ability of this rifle. The first shot was usually near the aiming point, but from that time on, it was pure speculation where the rest would go. Five rapid shots created so much heat, it was impossible to grasp the barrel, and the bullets landed on the target much the same way beans would fly from a sling shot. I'm certain the gunsmith who made this masterpiece had good intentions, but it would have been far wiser to have turned the barrel to normal specifications and ended with a rifle that weighed slightly over 5½ pounds instead of just under five. This would have made it a better outfit in every respect.

Nearly all the heavy barrels manufactured today, and there are plenty of them now, taper from the receiver to ¾" or less at the muzzle. From my long experience with the thick barrel, I can find nothing wrong with these semi-target barrels for varmint hunting. I believe I have fired all of them with the exception of the new Ithaca LSA 55, and I have nothing but praise. I can't say every rifle consumed factory ammo with the same group potential as I got when I worked up some handloads, but every rifle fired stayed below an inch at 100 yards when the right load combination was found.



**GUNWRITERS HAVE IT TOUGH**—as shown by this photo of Lewis with Kris Driscoll and Lynne Johnson of the public relations division of Ithaca Gun Company!

When groups of ½" or less are desired fairly consistently, the shooter will have to resort to the full weight benchrest rifle in most cases.

I think one major change made in the varmint rifle is the shorter barrel. By this I mean a barrel around 24" in length. The old belief that it takes a long barrel to be accurate is not true anymore. Some long-range benchrest shooters, particularly those who use slow burning powders in Magnum cartridges for the 1000-yard matches, still prefer barrels running out to 30" and more, but they are firing entirely different loads from the varmint hunter. I have always advocated the shorter barrels, and I'm happy to see the manufacturers and gun designers feel much as I do.

I believe the heavy barrel, along with other special equipment designed for the longer ranges, has been slow to catch on due to the fact that many persons are unwilling to consider the sport of varmint shooting a genuine

part of hunting. I've stated before how I was the only dyed-in-the-wool chuck hunter in my entire area just after World War II. I roamed the pasture fields evening after evening without hearing a shot. My enthusiasm to get others started led to my downfall; today I can't find a parking place, and the land I once had all to myself is now used by dozens of local chuck hunters. This is fine with me, and I am most pleased to know most fellows I meet while chuck hunting started through my efforts.

The varmint rifle is a special rifle. It should not be a combination big game and varmint gun any more than a pickup truck should be used for heavyweight hauling. When the varmint rifle is taken out of its precise long-range hunting realm or the area of light benchrest shooting, it has no practical purpose. The varmint rifle must remain a varmint rifle. If properly designed with a good stock and adjustable trigger, it will surpass the

conventional type rifle as a varmint outfit.

I have zeroed in hundreds of 270s, '06s, 8mms, and 32 Specials that were intended for summer chuck hunting, but the hunting rifle can't compare with the heavier jobs. I have never swung a golf club in my life, but I imagine one club *could* get a golfer around the entire course. But the expert golfer knows that a variety of clubs is needed to play the game as it should be played. The same holds true with varmint hunting; the man with specialized equipment will have more success than the fellow who sticks to his big game rifle for chucks.

I can't understand the thinking, but some companies offer heavy-barrel rifles without an adjustable trigger. Perhaps I have worn thin my belief in the adjustable trigger, but I honestly believe more than 90 percent of field accuracy depends on the trigger setup. Group shooting and rifle sight-ins have been my specialty for more than 15 years, and I feel I have used enough types of triggers to know why the three-stage adjustable one is a must.

Release time is the paramount factor in a high quality trigger. This is the length of time it takes the firing pin to strike after the sear has been disengaged. In a non-adjustable trigger, play or creep, heavy pull and override will have such drastic effects that the shooter will simply be at loss to have any control over the trigger. A quick release type has a firm, crisp feel with no perceptible movement either before or after the trigger is squeezed. This lets the shooter get all the accuracy possible out of a fine barrel and high quality loads.

It's possible for the shooter to have his sights smack on the bullseye and then wander off while releasing the trigger. I don't advocate trigger pull weight to be less than two pounds for the varmint rifle. There is no need for a touch type trigger similar to the set trigger. I have fired many fine rifles



**GROUP SHOOTING** tells how accurate a rifle and load is, but it takes an electronic chronograph to give precise data on the load's velocity. Lewis has this setup only a few steps from his home.



with trigger pull weighing nearly four pounds.

If I had a choice between a very expensive rifle and a mediocre job, but knowing the inexpensive rifle had a fine adjustable trigger and the other didn't, I would not hesitate to choose the less expensive rifle. I can cut the average group in half by installing a high quality trigger.

### **Era Long Past**

The era I spoke about in the beginning of this article—when heavy barrel rifles were rare—is long past. Now every manufacturer practically is pounding our front doors with his latest version of a varmint outfit. When I contacted major companies years ago about heavy-barrel varmint outfits, I received polite letters expressing sympathy for my cause but offering no hope that there was any intention on their part to alter the situation. Now I believe every American gun manufacturer except Savage has a heavy-barrel model, and I wish Savage would put one out on their excellent M110 action with a slight modification in their adjustable trigger. I've installed several wildcat barrels in the 110 action for left-handed shooters with no problems, and I feel the heavy-barrel varmint outfit would be a fine addition to the complete line of hunting guns Savage produces.

In the September, 1971, *GAME NEWS*, I had an article on the 22-250 heavy barrel, and a check back on the velocity and accuracy chart will show the exceptional results I obtained from the heavy barrels I used in my test. Many of the groups slid just over an inch, but this is still not bad, even though some shooters scoff at rifles that won't produce the inch group consistently. This should not be. The inch group should not be the only criterion used to judge the rifle. The simple fact that the rifle shoots a steady group pattern without throwing one or two indicates to me the rifle is above average.



**AFTER GROUP SHOOTING and chronographing, field testing is the final step. *GAME NEWS* Associate Editor Ted Godshall shows some of the results.**

All varmint hunters want rifles that will produce the magic  $\frac{1}{2}$ " or  $\frac{3}{8}$ " groups, but most of us will have to settle for less accuracy. I certainly don't want to discredit any rifle, but during the many years that I have been shooting and testing rifles, I have been shown literally dozens of one-holers. These are the kind shooters save. However, during all these years, not one shooter has brought his rifle to my benchrest and fired a similar group for me.

I take considerable pride in my Ruger No. 1 heavy barrel, and I have fired it for demonstration purposes many times. The average group stays just below the inch mark. On occasion, I have done better, but to me this fine rifle is a one-inch job at 100 yards. It's consistent and holds a tight pattern.

This is all I require, and I would be just as happy with it if the groups stayed at 1 1/4".

The heavy barrel has finally come to life. To name some that I've used a lot, we have the Mossberg 800V, the Remington 700, Winchester 70, the Sako Forester, Browning Safari, and the latest entry, the Ithaca LSA 55. There is no shortage, and all the purchaser has to do is decide which model suits his fancy. I'm a single-shot advocate, and the Ruger No. 1 appeals to me even over the Ruger M77 bolt action repeater or any one of the other fine makes and models.

It's a matter of individual choice, but stick with a heavy barrel if a summer of fine varmint hunting is the main desire. The extra weight will be appreciated when it comes time to test one's skill beyond 250 yards. I have shot a lot of fine hunting rifles, but I'll put my faith in the thick barrel when it comes to pitting myself against all the demons that plague the chuck hunter. I won't argue against the fact that the heavy barrel limits the rifle to just varmint hunting or bench shooting, but who ever thought of using a baseball bat for anything besides hitting a baseball? That's how I see it. . . .

---

### ***Take Hunter Safety Course***

Pennsylvania youths are urged to take a hunter safety course before the fall "rush" in order to be eligible to purchase a hunting license for the upcoming season.

In order to qualify for a Pennsylvania hunting license, a person under the age of 16 years must present either (a) evidence that he held a hunting license in Pennsylvania or another state in a prior year, or (b) a certificate of competency showing that he has successfully completed a course of instruction in the safe handling of firearms and bows and arrows.

Don't wait until the last minute to take this required course. Instructors are involved in many other activities and it may not be possible to accommodate everyone who waits until the week before hunting season to take the course.

## **Looking Backward . . .**

Wild Pigeons have been extraordinarily abundant on The Allegheny mountain this season, whither they had flocked to feed on the beach-nuts abounding there. The woods for miles were literally black with them. Any quantity might have been killed by going into their roosts at night and knocking them down with poles. On Tuesday night of last week, snow to the depth of five or six inches fell, and on Wednesday the Pigeons commenced their migration Southward. Flock after flock, flock after flock for hours they streamed over town and to the east and west of us as far as the eye could reach. Such myriads we never before beheld. At one time we noticed a dense stream of them stretching not less than four or five miles. On Saturday night and Sunday a South wind prevailed, and a considerable number returned. Of course we wish their Pigeonships pleasant and plentiful quarters wherever they may make up their minds to stay. (Hollidaysburg Register & Blair County Inquirer, Dec. 2, 1846)



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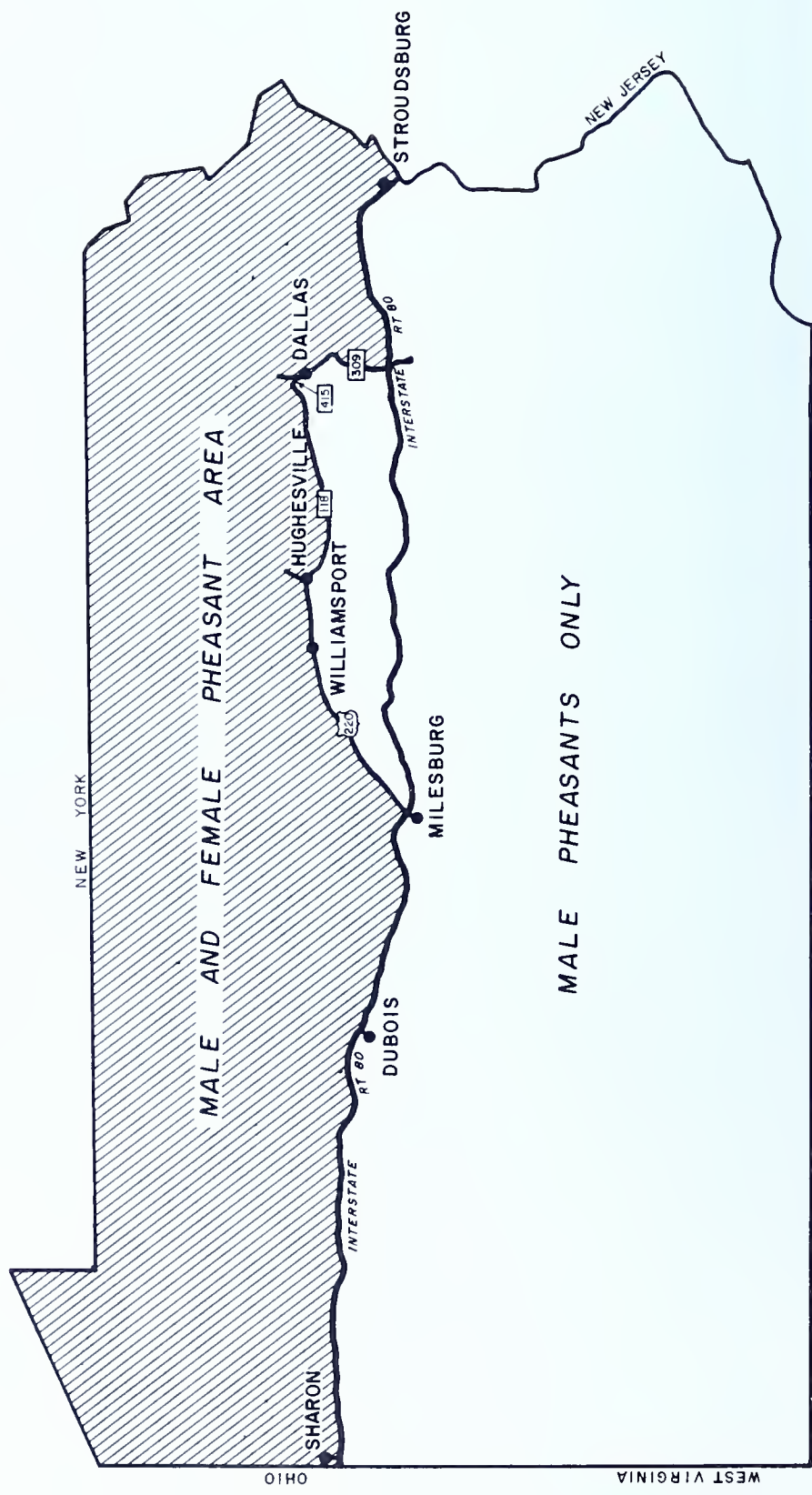
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### COVER PAINTING BY NED SMITH

From the standpoint of numbers bagged, the dove is the most popular gamebird in the country. It's a small creature, but as this painting suggests, it makes up in sheer speed, erratic flight and availability what it lacks in size. Its qualities are enough to attract more gunners each year, enticing them from the comfort of their homes to the baking hot fields and fencerows frequented by this gray-tan speedster in early fall. In addition to its challenge to the shooter's ability, the dove makes a unique addition to the menu. If you haven't yet tried it, make this the year.

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## Money Problem Not Solved

**J**UST AS LAST MONTH'S GAME NEWS went to press, we received notification that resident hunting license fees had been increased to \$6.70 for persons 17 through 64 years of age, to \$4.20 for juniors, and remained at \$5.20 for those 65 and older. We managed to get this information into the magazine, but had no time to comment upon it. I would like to do so here.

Many people will believe this increase should settle the Game Commission's money problem. It won't. A further increase will be requested of the legislature soon. A summary of the situation may help everyone to understand what has taken place over the past few years and why a higher fee is necessary.

The last license increase was in 1963. A steady inflationary trend in the economy since then has affected the Game Commission's ability to finance programs vital to sportsmen—land purchases, propagation, etc. Early in 1971, the Commission asked that resident license fees be increased to \$8.20 and nonresident fees to \$40.35. The nonresident boost was made law but there was no increase in resident fee. Some persons said that the nonresident increase would boost income by \$1.5 million annually and this should handle the situation. They based their estimates on 100,000 visiting sportsmen paying an increase of \$15.00 per license. The Game Commission said such a boost, without an increase in resident fees, would keep many nonresidents away. Time has proven the Commission's argument valid. As of July 21, 1972, we have sold 63,686 nonresident licenses at \$40.35 for the 1971-72 season, compared with 102,858 the previous year, 1970-71, at \$25.35. This gives a net income *loss* of \$24,010—a far cry from the \$1.5 million increase predicted by some.

The Commission continued to work for the \$8.20 resident fee. Early in 1972 a bill was introduced into the state legislature calling for this \$3 increase. This was amended in the House of Representatives to give the increase in two segments, \$1.50 each in 1972 and 1973. The Commission agreed to this, although it meant that half of the vitally needed income would not be made available for another year. However, the Senate did not approve this and voted the \$1.50 increase only for 1972. The House agreed to this change and it became law.

The Game Commission had not asked for a \$3 increase hoping to settle for half, a technique adopted by many who deal with state or national lawmakers. The full \$3 increase is needed. The reasons have been given in previous editorials (see the March and May 1972 issues of GAME NEWS) and explained in news releases mailed to all newspapers in the state. Therefore, further effort must be made to have the license fee raised in 1973. We sincerely hope that you, as a Pennsylvania sportsman who benefits from the Commission's game management programs, will support this effort and make your views known to your legislators. Remember—the Game Commission's income derives almost exclusively from license fees, *not* from the General Fund which comes from taxes.—*Bob Bell*





# The Turkey Mystique

By Bob Carter

I CAN STILL remember the little lurch I felt one sunny November afternoon ten years ago, when the smiling hunter I'd just met atop a ridge in Centre County reached proudly into his game bag and drew forth a remarkable specimen—a turkey vulture.

I admit that a turkey's head close up is no visual delight, but this bird's head was so ugly I couldn't believe the guy had shot it in mistake for a turkey. Also, it smelled a bit high. When I tried to tactfully mention his error, my friend took off in a huff. Found out later he was a practicing physician—a presumed expert in such matters as comparative anatomy.

That chance encounter got me thinking.

How many of those glamorous chaps who trickle through the woods each fall with cedar box callers and shotguns and camouflage outfits are truly pros in the science of extracting turkeys from the wild?

To find out, I began conducting innocent little interviews with turkey hunters met in lawful pursuit, plus noting my own experiences. The hunters often sounded remarkably like the books and magazine articles on turkey hunting. You know, the ones that carry illustrations of a wary tom frozen in the foreground, while your woodsman's eye can barely pick out the hunter there in the early morning mist, also frozen, with his back to a cypress knee or whatever.

After several seasons of roadside chats, I've been able to set down a clearcut list of undeniable rules for successful turkey hunting. I got 'em from the men who oughta know. Turkey hunters.

*Rule One: Ain't no sense in huntin' turkeys except the first hour of the day.*

This one came from a Potter County native I met on a pipeline right of

way—he sitting on the pipe. Time: 2:10 p.m. Temp. 62.

"Howdy," said I.

"Yup."

"How you doin'?"

"Hah! Nothin', nothin'. You don't see no turkeys this time a day."

"No?"

"Naw. Morning's the time to get turkeys. The only time. Ya gotta git out before daylight where you know of a flock. Catch 'em comin' off the roost. Then jist do a little bit of callin'. That's when the action is. All the other turkey huntin' is just time wasted. Time wasted."

"Oh, I see. What you watchin' for now, squirrels?"

"Naw, I don't never shoot no squirrels. No, jist last week, my boy got a hen crossin' right here. One of a bunch, ya know. They come slip-pin' right off that bench there, just a pickin' along, he said. Turkeys never seen him 'til he shot."

"Just at daybreak, I'll bet."

"Naw, naw, it was jist about now. Don't know what got into them turkeys, trottin' through a place like this, middle of the day."

Then, there's Rule Number Two. I picked this up from many a turkey hunting expert, as well as painfully working it out for myself:

*Rule Two: A rifle's the only thing to carry turkey hunting.*

Watching a mountaintop saddle one balmy turkey season Saturday, I was following Rule Two: lugging a 243 with a turkey load, 4X scope. Some directions I could see 300 yards. Shortly, a turkey appeared, feeding across the bench 150 yards out.

"Aha, I've got a rifle, you rascal," I muttered, real proud of myself.

Eased it up. Got my eye in the scope. Had to pull my hand over to the trigger guard from the place I'd been parking it—on a limb off to my



**THE TURKEY HUNTING EXPERT** tells about their incredible sight and hearing, then takes off, kerthrash, kerthrash, silhouetted against the sky. . . .

side. Turkey sees that little movement. Flies. I cry a bit in silence, but stay on duty.

Comes 4:30 and a turkey is waltzing right up to me from the same general area. In a minute this big fat hen is inside 30 yards and I have another problem in getting that rifle up. A gray squirrel has been digging furiously in the leaves behind by boot for maybe two minutes, hasn't noticed I'm alive, so I take the chance, raise the rifle when the turkey bobs behind a big red oak in front of me. Squirrel erupts screaming right at turkey. Turkey erupts in fantastic, thrashing, buzzbomb takeoff. Ever try to pick off a turkey with your scoped 243 that way?

Now I got smart and switched onto *Rule Three*, which I would have been following anyway if I'd had any smarts.

Didn't all the turkey articles show guys barely visible through the fog against their cypress knees with *shotguns*? Certainly they had shotguns.

They had shotguns because *real turkey hunters never carry nothin' but a shotgun*.

About the second morning, I started out in the dark toting a 12-gauge full of Magnum 2s. I felt acutely prepared. I could see the bulk of that huge hen lunging into the air right in front of me. I could imagine the burst of feathers as the big bird was centered by a pattern and flopped to earth with a thud. I could just about taste turkey.

My daylight calling spot was on a faded log road that angled up the side of a ridge. Big timber with heavy wildgrape hangings, occasional open spots. Turkeys roosted all over that ridge.

I tried a few yips every so often. No answers. At 7:30, I looked out the bank for the fiftieth time. A gobbler was standing in the road about 105 yards away. While I watched, he shook himself, puffing feathers into a small black mountain. Then he grandly stretched his right



leg far behind him and dropped that wing for a stretch, too. Shaping back up, he began to idly peck at some grapes dangling overhead.

He never came closer, and my calls, when he drifted out of sight, were ignored. The shotgun that morning felt like a cork gun.

Then there's *Rule Four: Once a turkey answers, never call again.* Very common in my interviews. Everybody agrees on that. All the articles say that.

I used to say that. Then, another morning a couple years ago my friend Bob Logue and I slid into a woods before daylight in a fog so thick it wet down our clothes and faces. When full light had shown no birds and brought no answering yelps, we began a slow stillhunt out the ridge. Twenty yards apart, we struggled to keep sight contact. Then, turkeys blew off in all directions, like airborne ships in that fog.

With scope-sighted rifles, we had no shots. But we hit the brush in 150 more yards, waited 20 minutes and Bob started calling:

*Earp, earp, earp.* And so on.

Almost instant answer.

Birds were obviously coming back on the ground.

*Earp, earp, earp,* Bob went on.

"Shut up," I hissed from 50 feet away, my face hugging the wet leaves.

He thought I was telling him to step it up. *Earp, earp, earp.*

We were done for, I knew.

But those birds hadn't read a single article. They cheerfully yapped right back every stride, and there they were. Twenty-five yards away, poised in the fog, just beginning to be suspicious.

*Wham!* My rifle dropped a big gobbler. The rest flew. Bob eased over and admired the bird.

"You ain't supposed to keep calling that way," I complained.

"Don't see it hurt any," Bob said, eyeing my turkey. "Let's hide again and call some more."

We did, and I watched while a

gigantic hen answered instantly and just smoked her way over to Bob's huge tree hiding place. When he heard the thump of feet, he looked around the tree, expecting to chew me out. He and the turkey flinched very obviously from a range of, say, two feet. She flew; he shot and missed and swore a little.

As the roar of wings diminished, I stood well behind my tree and said, "See there? You called too much."

Then there's the next super rule, *Rule Five: Don't waste your time trying to sneak up on a turkey. It's impossible.*

Many years ago, I joined the then GAME NEWS editor for the first day of turkey season in some outstanding mid-state range. For a number of reasons, we were late getting to the area and our host was disgusted because we weren't in position for the 9 a.m. start.

"At least we could have had a chance to get some turkeys pushed to us if we'd been on top the mountain by now," he said.

As we commiserated in his campyard, a battered Plymouth clanged to a halt and coughed up two eager beaver hunters. We waved and they churned up the bare ravine by camp toward a pocket of pines.

"Hey, fellows," George yelled. "It's mostly open country over that direction. If you're after turkeys, I'd say come over this way where we're headed."

The two amateurs stared back at us, waved vaguely and proceeded to literally stalk that isolated little pine grove. They disappeared into the two

## Moving?

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acres of pines, cracking brush and crunching frost-dried grass, while we sniggered and checked our lunch bags.

Of course, turkeys flared out of those pines like they'd been packed in there. A large barrage. A couple minutes of whoops up there and the two men came back down the hollow, each with a bird.

"They was jist sittin' in there, in them trees," one explained in what had to challenge for the world's most obvious statement.

Bang-bang, went the Plymouth doors, and the guys were gone. Watching the dust, my brother said, "Say, George, why don't we get started on the turkey huntin'?"



**EXPECTING TO CHEW** me out, Bob looked around the tree. He and the turkey flinched very obviously from a range of, say, two feet.

There's still another great rule that explains a lot of thin turkey soup. *Rule Six* goes something like this: *Turkeys will range fantastic distances and are almost impossible to locate if there is a lot of feed most everywhere on a given fall.*

I used to follow that rule real well. Day after day, and never the sight of a turkey feather. On or off the birds. If I didn't find much feed near me, I just assumed that feed must be plentiful everywhere I hadn't been hunting, thus allowing the birds all that territory in which to luxuriate.

Then, two years ago, I got into some new country over near Blackwell, in Tioga County. Steep country it was. Once, I had to sit down and crab backward to get off a ridge without tumbling down over.

First morning in there, I ran into turkeys. No shot. With all this feed (which there was), I thought, I'll never spot any of those slick rascals this year. They can move a couple mountains away at will.

Next morning, I flushed four in the same spot. No shot. That afternoon, they were back. Twelve or so of them. Got a decent rifle shot at about 200 yards. Missed.

"Well, never sec them again," I said.

Following week, Bob Logue shoots one in the same thicket. Next weekend, he steers two other turkey-hunting friends through those steep tangles and spots turkeys close three times.

Next weekend, a watcher of ours leaves his position just in time to see two gobblers flush away from him.

Comes deer season, they're still in there.

In January, there were turkey tracks all over that hill. I'd tell you the spot, but I go back there at least once every year and stand around.

As far as that flock of turkeys is concerned, they are determined to ignore all rules, all feed situations, all hunter pressure and any vestige of common sense. They like that ridge



and they are not about to be shoved off it by any frantic folks in blaze-orange hats.

*Rule Seven is: Turkeys have almost unbelievable sight and hearing.* That one, friends, is true, true, true. Every hunter I've interviewed in the boonies about the rules of turkey hunting says, "I love to hunt turkeys 'cause they're such a challenge. They have just unbelievable sight and hearing."

While we are conducting our interview, the typical hunter talks to me in a nice, full, on-stage expert's voice that, if I was a turkey, I know I could hear at least to the next ridge and remember the location 'til the next morning.

Then, when we are done, the hunter takes off, kerthrash, kerthrash, out the edge of the hill, beautifully silhouetted against the sky.

I noticed a lot of those experts quote those rules, but just can't stand to hunt by them. After all, it's no fun to be absolutely silent and motionless in the woods. So they rumble through, carrying shotguns and callers, secure in the knowledge that they can't walk up on any turkeys anyway. It's impossible.

There's still another terrific rule, quoted, with slightly varying percentages, in the turkey hunting articles. You hear it a lot in smoky sporting goods stores and general stores of the mountain variety: *Rule Eight: Ten percent of the hunters get ninety percent of the turkeys.*

I have tested that rule a lot through my interviews. There are a whole batch of lines in there, like:

"I was just sittin' there for squirrels, when this big bird crashed to a landin' above me. I looked up and seen it was a turkey and shot him with the 22."

"I taken the shotgun out one mornin' to bring in the cows, 'cause there'd been a couple rabbits hangin' around the creek. These turkeys busted up out of the grass and I got the big one."

"We was headin' for town to get a



**EXCEPT FOR A patch of pines, the country was bare, but . . . "They was jist sittin' in there, in them trees," the amateurs told the experts.**

flat fixed on the pickup and these here turkeys sailed across the road . . ."

"I was walkin' along through the woods and this turkey just flew up outa the brushpile next to me."

Then there was the guy who came stomping through the woods behind Logue as he was calling a flock into shotgun rangc. The hunter never saw Bob hunkered by a broken over locust at the peak of a bank. The turkeys were just over the rise.

Our stumbling-along hunter strode vigorously past speechless Bob and bounced about fifteen turkeys into the air at point-blank range. Three booms and he actually dropped his bird. While Bob watched from semi-hiding about 30 feet behind the hunter, the lucky expert grabbed his bird, mumbled congratulations to himself and left, never knowing he had been

within a few steps of another hunter.

Undaunted—almost—Robert moved off a ways and talked a turkey into his game bag with his usual incessant string of earps.

Finally, finally, after all these years of chasing turkeys, I've developed my own rule. The supreme rule of turkey hunting, *Rule Nine*. It will get you so many turkeys that the sport will become a little drab for you. *Rule Nine*:

*Get up early and take your rifle and your shotgun into the woods as silently as possible and make a few calls, but not too many, and when you get an answer, call a few times if it seems appropriate, but if you feel like you're going to scare 'em, don't dare call after they answer, stay out 'til the last legal minute, don't make a move or a sound, but spend some time just moseying along like you don't expect turkeys, but watch all the brush piles and look overhead once in a while, and stay someplace you've seen tur-*

*keys before or have never seen one, but keep where the feed is thick for turkey that stay where the feed is or stay where the feed is thin for turkeys that get frightened off by hunters who follow the feed, don't plan on seeing any turkeys that you haven't expertly called to the gun, but keep a little alert for turkeys that fly by, get scared by Jeeps, roost over your head or that are scratching in the campyard when you heave the dishwasher out in the morning, remember that you are an expert and will thus get 90 percent of a turkey for every 1.1 times in the field, sneak up on any thick spot that looks like turkeys might sit there and let you do the impossible thing and if by any remote chance a turkey gets within range of either your shotgun or rifle, try to get him in the right sights fast.*

You can take my word for it . . . if you follow *Rule Nine* religiously, there ain't much to this turkey huntin' business.

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**ON BEHALF OF THE GAME COMMISSION, Governor Milton J. Shapp accepts the National Rifle Association's award for Pennsylvania's Hunter Safety Program from Cliff Morrow, the NRA's Director of Conservation. Watching are Dale Gaskill of the NRA and Glenn L. Bowers, Executive Director of the Game Commission. States qualifying for the award are determined by a special committee of the International Association of Game, Fish and Conservation Commissioners.**





# Is The Dove A Successful Game Bird?

By Lou Hoffman and James S. Lindzey

ON THE FIRST day of September, thousands of Pennsylvania nimrods will find themselves disregarding summer's heat as they try their luck at the season's first game bird. However, they will represent a minority of hunters, for their quarry does not, in this state, rank with the grouse and pheasant. Yet for about two weeks, more action is to be experienced by these hunters and more shells will be expended on this bird than on the combined total of all other game birds. Their target will be the dove, which became legal game in Pennsylvania in 1945. Since that time the popularity of dove hunting has grown appreciably.

The success of the dove as a species is evidenced by its wide range which extends from southern Alaska and Canada to Latin America. Although it nests in all states except Hawaii, only thirty consider it a game bird. In others it is classified as a song bird, though game biologists in most of these non-hunting states realize that doves could be hunted without jeopardizing their population levels. There are three dove management units, the Eastern, Central and Western. In the Eastern unit, which includes all of the U.S. east of the Mississippi River, there currently is no dove hunting in New England (except Rhode Island), New York, New Jersey, Indiana, Ohio, Michigan or Wisconsin. Pennsylvania is the northernmost state in the eastern half of the nation that permits dove hunting, with the exception of Rhode Island.

*This is Paper No. 161 of the Pennsylvania Cooperative Wildlife Research Unit, Pennsylvania State University. Lou Hoffman is a graduate assistant involved in this research program and Dr. Lindzey is leader of the unit.*

This species has emotional overtones that clearly affect the opportunity for its sporting use. Historically it is the bird of peace, and the mournful notes of its song do not lend well to a game species. Also, since it is a cousin to the passenger pigeon, some protectionists are especially defensive concerning the dove. Nonetheless, the dove has survived well in the face of regulated sport hunting and appears to prosper with reasonable hunter harvests.

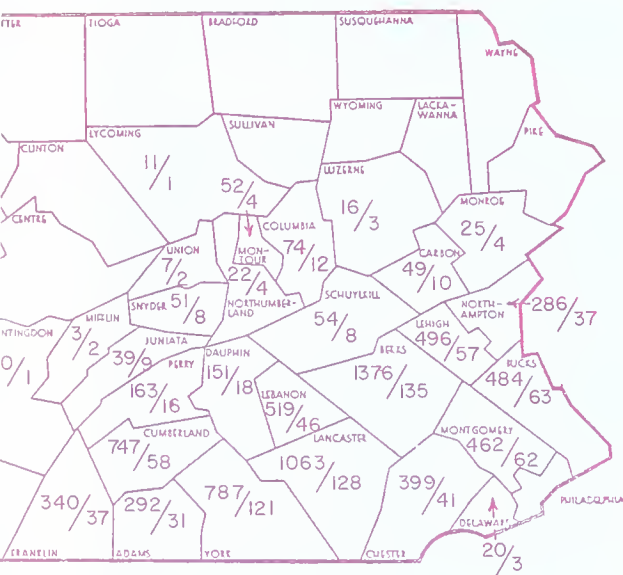
## Many Studies Completed

The basic biology of the bird is well documented, for many studies have been completed relating to its natural history. It is in the same family as the common pigeon, *Columbidae*, and many characteristics of the two are similar. Within its large range, it adapts to nesting in many different habitats including coniferous stands, deciduous areas, different shrub types, and even on the ground.

Like the nesting habitat, many traits of the bird vary depending upon the area in which it is found; and it is probable that its success is due, at least in part, to this adaptability. This report is concerned with the doves in Pennsylvania—their characteristics and behavior.

The migratory flights of doves returning to the Keystone State occur in March. Band returns indicate that the wintering area for these birds is along the southeast coast, including the Carolinas, Georgia, and Florida. Since doves are almost exclusively seed eaters, they can find food early. Their breeding cycle precedes that of robins, swallows, and other insectivorous birds characteristic of late spring.

As soon as males reach their nesting territory, they select perches from which they emit their ardorous coos and perform aerial gymnastics to attract their mates for the season. After



**RESULTS OF 1971 dove wing survey in southeastern Pennsylvania. Figures show the number of wings and number of envelopes returned.**

being selected by a female, the male leads her to prospective nest sites (probably different conifers) and, with her approval, begins carrying building materials so that nest construction can begin. It takes about four to six days to finish the nest building, and another two or three days for the female to lay the clutch of two pearly white eggs. Incubation and brooding follow with both sharing these duties. The male occupies the nest during most of the daylight hours, and the female takes her turn at night.

After about two weeks of incubation, the nestlings, with the help of egg teeth, emerge from their shells. Naked, blind, and a little more than an inch in length, they are completely dependent upon their parents. For the first few days they are fed a mixture of small seeds and dove "milk" which is regurgitated by the adults. The latter is actually not milk as we know it, but is a chalky mixture of cells and fluid sloughed from the cells of a gland located in the crop. At about five days the young are fed a

diet composed of seeds ranging in size from those of small weeds to last year's corn crop. Then, at about fourteen days, the young are fledged and are on their own.

Parenthood is obviously brief, and the nesting cycle lasts just over a month. The adults are not finished, however, and the whole process is repeated again in May. There may be as many as five nesting attempts which will carry them through the month of August. These repeated nesting locations may be the same as previously used sites, newly constructed locations, or even the still functional robin and grackle nests available in the area. For various reasons (wind, rain, abandonment, predation), only half of these attempts will succeed, and each adult pair will produce between four and six young doves over the course of the nesting period.

Life expectancy for a newly hatched dove is not long, for it is estimated that between 70 and 80 percent of them will not live one year. This means that for every 100 doves hatched this summer, only 20 to 30 will be alive next summer. Weather and disease are the primary decimating factors responsible for this phenomenon. If a juvenile survives his first year, the odds are more favorable, as adults have only a 50 percent turnover rate.

## Migration

During late summer the juveniles form flocks in preparation for the flights southward. The adults follow, and migration begins in September and continues through October and November. Depending on the severity of the winter, some birds may spend the entire year within Pennsylvania.

Research has been the foundation for developing management plans that permit us to use the dove as a game bird. Because the dove is migratory, regulatory measures are internationally molded, with the Bureau

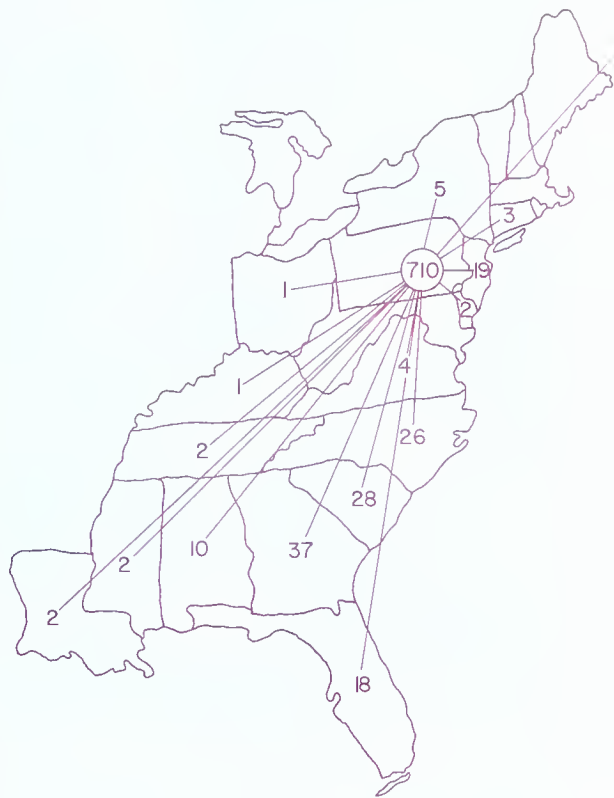


of Sport Fisheries and Wildlife assuming this nation's responsibility to assure the welfare of the bird. The dove is grouped with the webless migratory game birds which include white-winged doves, band-tailed pigeons, woodcock, snipe, rails, and other shore birds. As hunting pressures increased, a need for more definitive data on the dove and related game birds developed. Between 1967 and 1972, \$870,000 of federal funds were appropriated for various research programs relating to these birds. This money was divided among the 34 states that submitted approved research proposals. Approximately one-third of the allocation was earmarked for work relating to doves.

### Developed in Southeast

The dove project was developed in the southeastern part of the Commonwealth where the concentrations of doves occur. From 1968 to 1970, 1969 doves were banded in Berks, Lancaster, Lebanon, Lehigh, and York Counties. Last year the program was reemphasized, and 5716 birds were banded. Montgomery County accounted for the bulk of the birds, as over 3600 doves were handled between June and August of 1971. District Game Protectors in these areas accomplished the bulk of the banding, and came through with another bumper crop this past summer.

Leg-banding yields information relative to migratory routes, longevity records for adults and juveniles, population levels, harvest rates, and other insights pertaining to the bird's biology and success. The first recovery of a Pennsylvania-banded dove occurred in Georgia in January 1921. The bird was banded in May of the previous year. As of August 1970, the Bird Banding Laboratory in Laurel, Md., reports 871 recoveries for doves banded in this state. Of these, 710 have been recovered within the state. An additional 69 birds have been banded in other states and recovered in Pennsylvania. Figure 1 shows de-



**FIGURE 1**  
LOCATIONS WHERE 871 doves banded in Pennsylvania through August 1971 were recovered are shown above.

tails of band recoveries through July 1970.

It appears that Pennsylvania doves of the summer spend their winter in the coastal regions of the Southeast. It is also apparent that most of our recoveries occur in Pennsylvania, suggesting that most birds we are harvesting are produced within our state. Of the 5716 birds banded last summer, we have 270 recoveries to date. Only four of these were recovered outside of Pennsylvania. New Jersey, Maryland, Alabama, and Georgia each reported a single recovery. Of last year's recoveries, 249 resulted from the hunting season harvest. The part that sportsmen play in helping to collect management information is obvious.

We also are studying dove production. A tool used to monitor the success of production is the wing survey. By examining wing feathers sent in by hunters, we can usually determine if the bird was a juvenile or an adult.

Table 1

## The Ten Leading Counties Submitting Wings for the 1971 Wing Survey.

County	Total Wings	Total Envelopes	Wings/ Envelope	Immature	Adults	Damaged/ Unknown	Ratio Imm./Ad.
Berks .....	1376	135	10.2	1104	193	79	5.64
Lancaster .....	1063	128	8.3	848	162	53	5.11
York .....	787	121	6.5	613	135	39	4.43
Cumberland .....	747	58	12.9	568	134	45	4.13
Lebanon .....	519	46	11.3	407	94	18	4.33
Lehigh .....	496	57	8.7	402	64	30	6.17
Bucks .....	484	63	7.7	401	71	12	5.52
Montgomery .....	462	62	7.5	362	73	27	4.62
Chester .....	399	41	9.7	303	70	26	4.27
Franklin .....	340	37	9.2	291	39	10	7.46

With this information we can compute the ratio of juveniles to adults in the population, and this is a reliable index of the year's production. A ratio of 4.5 juveniles to one adult is considered good. The response of sportsmen to our wing collection survey was very gratifying, as we received in excess of 8000 wings by mail. Although some could not be aged for various reasons, the final tally showed 6232 juveniles and 1338 adults. The age ratio for doves harvested in Pennsylvania in 1971 was 4.66:1. This means that upon returning from an average day in the field (if 1972 production is similar to 1971), you should find four or five young doves for every adult bird in your bag. Since juveniles are more susceptible to hunting, particularly because of their early flocking habits which tend to attract hunters, the actual age ratio is somewhat less than that indicated in the sample. However, regardless of this bias, the ratio is sufficiently high to show that dove production in our state is indeed healthy. Table 1 shows the tally and ratios for the ten counties from which we received the most wings.

The survey is again being conducted this year, and we invite those wishing to participate to send their

names and addresses to Study Coordinator Lou Hoffman, 731 North George Street, York, Pennsylvania 17404. The necessary information will be forwarded to you. Again, our thanks to those who made our work last year so successful. We look forward to another good response this season to permit us to confirm last year's data and to keep our research finger on the pulse of our dove population.

The dove in Pennsylvania is demonstrating its ability to hold its own as a game bird, but it is important to keep in touch with its status so that management can provide the necessary "insurance." To those who feel the bird's docility makes it unworthy of sport, we invite you to observe a skilled hunter attempting to harvest his bag. We believe you will see that this pursuit is indeed a sporting venture—one that more of our hunters should find to their liking.

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- Hanson, Harold C. and Charles W. Kossack. 1963. The mourning dove in Illinois. Technical Bulletin No. 2, Illinois Dept. of Conservation.

## Not Thinking Much

Spawning bullheads and catfish are a threat to their own offspring. They pick up the eggs they lay in holes dug in the mud, to wash them in their mouths, and sometimes forget to return them to the nest.





WARREN TOOK HIS CANVAS COAT, 22 Hornet, pocketknife and lunch and headed for the car. His biggest problem was getting past Lady. . . .

## Lazy Man's Hunt

By David S. Bair

**I**T WAS 9 o'clock on Saturday morning and Warren was drinking his second cup of coffee. Outside you could hear the *booms* as the opening shots were fired at rabbits and roosters.

"I thought you were going hunting," Mabel said.

"I am," Warren replied to his wife of nearly thirty years. "It's just that I'm in no hurry."

"You always told me that it was the guys that got out there first that got their limit."

"The first day's the best day, but I'm going for squirrels."

"What's that got to do with it?"

"The squirrels aren't out of bed yet."

"You're kiddin' me."

"No, squirrels don't get up early. And I want them up and moving about when I get there."

"How you going to hunt them?"

"Sit."

"You're going to do it the lazy way today?"

"That's right."

"Who you going with?"

"No one, I'm going alone. Most guys can't hunt this way and I want some nice squirrels for a potpie."

"Who's going to cook it?"

"You are, but I'll skin and clean them."

"Where you going?"

"I'll go to Henderson. I'll take the little car and go up Interstate 79 and get off at the Greenville-Sandy Lake Interchange. I'll go to Sandy Lake and from there I'll take the back road to Henderson. I'll drive off to my left into the State Game Lands and hunt squirrel in the hickory and oak."

"Have a good time."

"I will."

Warren took his canvas coat, 22 Hornet, sharp pocketknife, pocket

stone and lunch and headed for the small car. His biggest problem was getting past Lady without her knowing he was going hunting. The beagle was 15 years old and still ran rabbits on his neighbor's 30 acres. But this wasn't rabbit day for Warren. He was going for squirrels. Warren quietly snuck into his small car. It was really his wife's car and it looked like a plain-Jane coupe; but it would fool most people. It was an American made sub compact with a bigger engine than most, special tires, special handling package. . . .

The radio was playing tunes of the '30s as Warren drove up Interstate 79 North and he mused of many things . . . When I was a kid, who'd have believed a big wide divided four-lane highway would ever cut through these hills? Back then, when Dad took us from Franklin to Greenville, it took all day. The roads rutty and bad. Muddy in the spring, dusty in the

summer, snow choked and impassable in the winter. Those early cars didn't even have fuel pumps and if the gas ran low, you turned the car around and backed up the hill. That way the gas tank was higher than the engine and the gas ran downhill. Never thought I'd live to see a car that would go up some of these hills without shifting gears.

### Big Woods Begins

Warren was soon at his interchange. The little car swept down the long hill into Sandy Lake. Here the "big woods" country begins in all its glory. The hills are covered with trees. Sandstones big as houses sprawl all over the hills. Blacktop roads follow old deer trails through the woods. The Indians followed the deer. The early settlers followed the Indian paths. They chopped the trees down, widened the paths and pushed their wagons through. Governor Pinchot in the '30s blacktopped the back country roads and got the farmers out of the mud. These are the roads that Warren used to get back into the Game Lands between Henderson and Raymilton.

He had his own special place. A half mile off a blacktop, across an open field and over a split rail fence, the oak and hickory grew high and big in a sheltered valley that is on State Game Lands. He looked for signs and found them. The squirrels had been using the rocks and a couple of stumps as dining room tables. Warren smiled.

The sun was warm and the day was perfect. Empty nut shells were all over but there wasn't a sign of a squirrel anywhere. Warren got comfortable, his back to a big oak tree. his lunch beside him on the ground. He slid a clip of three into the Hornet, closed the bolt and snapped the safety on, poured a coffee and started munching his lunch, a cheese sandwich, an apple and a candy bar.

Warren checked his sights and his field of fire. He was using open iron



**THE LITTLE CAR** swept down the long hill into Sandy Lake, where the "Big Woods" country begins in all its glory. Warren felt at home.



sights on the Hornet and he knew it would hit anything he pointed it at in a nearby tree. He pulled his cap down to shade his eyes and settled down to wait out the squirrels. Warren talked to himself in his mind:

"The reason you came was for squirrels. To take home and cook. For potpie. Squirrels come in three colors—red, gray and black. I'm after the big fat grays. I can't move for at least a half hour; otherwise they won't come out. They'll stay hidden. The Eskimos wait for hours on their hands and knees beside an air hole to spear a seal so the whole tribe can eat. I'm an Eskimo. I'm an Indian. I have to bring food home. I notice the people that always make fun of and degrade the hunter—the ones who always ask how anyone can shoot an animal—always eat steaks. Slaughtering a big brown-eyed cow is all right, but shooting a deer or rabbit or squirrel is no good. Ha. Some of those guys with big jobs and big incomes would be low man on the totem pole if their lives depended on bringing home some meat. And ol' Charlie that runs the gas station would be chief of the tribe. He can smell . . . something moved in the tree. Saw it out of the corner of my eye . . ."

Gray squirrel, high in the oak. Two o'clock.

### Two-Inch Target

Slowly the Hornet came up and lined on the target, a two-inch head in a tall tree. As you squeeze a lemon with all your fingers, Warren squeezed off a shot and the squirrel fell out of the tree. Warren marked it with his eyes, never moving. The squirrels were coming out. The next one was spreadeagled on the gray trunk. Warren's bullet, aimed deliberately, hit the bark of the hickory right beside the squirrel's head. It fell to the ground, lay motionless. Warren never moved except to reload his clip. Two more squirrels fell to Warren's Hornet in swift succession. Now Warren moved.



**THE REASON YOU** came was for squirrels, he told himself. To take home and cook. For potpie. I'm after the big fat grays. They eat better.

He gathered and skinned the squirrels, cutting the hide around the middle of each and peeling it off much like you would pull off a tight glove. He field-dressed them, buried the offal, put the clean meat into a plastic bag and headed back toward his wife's car.

Warren made sure his rifle was was empty, placed it and the squirrels on his hunting coat on the floor of the little car. He was home before 4:30.

"You're early," his wife said.

"Got four."

"I thought the limit was six."

"It is, but I didn't think we needed any more."

"We don't, not with the kids gone. Are you ever going to teach your son-in-law to hunt squirrel?"

"Sure, anytime he's ready to stop running through the woods looking for them. He's got to learn to be lazy."



## A Look at Middle Creek

By Donald Zimmerman

PGC Wildlife Conservation Education Specialist

PGC Photos by Joe Osman

**F**OR YEARS Pennsylvania waterfowlers have ventured to the Pymatuning Waterfowl Management Area in northwestern Pennsylvania to bag a goose. Though thousands of Keystone sportsmen apply for the one-day Pymatuning hunting permit, sound waterfowl management dictates that only some 4000 hunters can use the area annually. As waterfowl hunting pressure increased through the years, the Game Commission recognized the need to create more wetland habitat and establish additional duck and goose management areas.

Therefore, Game Commission personnel began searching throughout the Commonwealth for areas to develop. Field officers in southeastern Pennsylvania had observed that waterfowl generally followed the lower Susquehanna River, but comparatively few had stopped because of habitat deficiencies.

In searching southeastern Pennsylvania, Game Commission personnel found two areas of suitable wetlands. Middle Creek, the subject of this article, is nearing completion, while construction has begun on Blue Marsh, to be the subject of a later GAME NEWS article. Lake Ontelaunee, also known as Maiden Creek, was featured in a July, 1971, GAME NEWS article. It has been managed as a waterfowl propagation area since the 1930s.

Though all habitat improvements on Middle Creek aren't finished, its 400-acre lake is full, numerous ponds, dikes and potholes have been built, the Administration and Visitor's Center is nearing completion, and waterfowl are using the area.

Middle Creek is about one mile south of Kleinfeltersville in Lebanon County. From the Pennsylvania Turnpike, the easiest way to reach Middle



Creek is to leave the Turnpike at the Reading-Lancaster Exchange, Exit 21, take Route 222 north about a mile and turn left on Route 897 to Kleinfeltersville. At the west end of this village, a sign gives directions to the Middle Creek Waterfowl Management area. This area of slightly more than 5000 acres straddles the Lebanon-Lancaster county line and makes up what is now State Game Lands 46. About 4100 acres of the tract lie in Lancaster County, while slightly more than 900 acres are in Lebanon County. The original SGL, purchased in 1929, was a 1758-acre woody ridgeline tract managed for small game.

Though no thought was given to waterfowl habitat development in the area in the early 1930s, Game Commission field men sometimes observed waterfowl flying over the general area of SGL 46. Based on the experiences at the Pymatuning Waterfowl Management Unit, the commission officers knew that waterfowl could be encouraged to stop and rest on an area by developing suitable feeding, loafing and resting areas.

The opportunity for the acquisition of additional lands bordering SGL 46 came when money from Project 70—a \$70 million bond issue passed by the Legislature and approved by a vote of the electorate—was allocated to the

Game Commission. Project 70 money was earmarked for the purchase of lands as public use areas before soaring real estate prices made such acquisition impossible.

The planning, acquisition and development of the area was made possible by money from the Federal Bureau of Outdoor Recreation, Project 500—a \$500 million bond issue passed by the Legislature and approved by popular vote—and Game Fund money. Among the improvements constructed with BOR and Project 500 funds are the lake, numerous small ponds, the Administration and Visitor's Center, hiking trails, picnic areas and parking lots.

### Soil Conditions

Wildlife habitat management on Middle Creek began with an evaluation of the soil conditions. Under the Soil Conservation Service classification system, some 250 acres were designated Class II soils (suitable for agricultural development), while the remaining land, nearly 4750 acres, was listed as Class III through Class VIII soils (usable for grazing and wildlife habitat development).

Along Middle Creek, the stream which flows through and gives the area its name, most of the lowlands were wet and marshy. This condition made the area suitable for several im-

**NUISANCE GEESE COLLECTED** from all over southeastern Pennsylvania formed the nucleus for the more than 600 Canadas which now call Middle Creek home.





**WIRE-AND-STRAW "sandwich" is one type of nest used for mallards at Middle Creek. Easily made, it is liked by these ducks.**

poundments of water.

A key attraction for both waterfowl and visitors is the 400-acre lake formed by damming Middle Creek. Most of the lake has been established as a waterfowl propagation area, but some 35 acres adjacent to the public use area will be open to fishing.

Scattered throughout the remaining lowlands are 70 acres of water impounded in small lakes, potholes and millet dikes. Most of these impoundments contain less than an acre of water and some have provisions for partial draw-down or drainage for planting millet.

Soil conservation practices initiated on the area include construction of diversion terraces, field contouring and alternating strip crops. The terraces control runoff and reduce erosion by routing water around hills and releasing it gradually down grassy waterways into ponds.

In addition to the soil conservation

practices, trees and brush were removed from selected areas which were then planted to forage and legumes for goose pasture.

Approximately 800 acres are being developed for agricultural and wildlife food plots. Some areas are share-cropped by neighboring farmers, others are farmed by Game Commission personnel.

Under the share-cropping agreement, the farmer plants and cares for the agricultural crops and, when they are ready, harvests three-quarters of them and leaves one-quarter for the Commission's wildlife agreement program. These remaining grains are left standing through the winter. When the spring migration begins, these crops are mowed down for migrating waterfowl.

### **Water Level Lowered**

About the first of June each year, the water level of the lake will be lowered, exposing some 60 acres of mud flats. These flats will be sown to Japanese millet, which matures in approximately 60 days. When it is ripe the water will be raised several inches, flooding a portion of the millet. After waterfowl utilize the flooded millet, the lake will be raised several more inches. This will continue in increments until the millet has been consumed.

The same procedures will be used on some of the smaller ponds and dikes with draw-down outlets, thus providing additional feeding and loafing areas.

On other waterfowl management areas, wildlife managers have found that artificial nesting sites for ducks and geese increase productivity above what could be expected naturally on an area. Therefore, the Commission embarked on a program of providing man-made nesting devices for geese, mallards and wood ducks on the Middle Creek area.

These devices are placed near ponds or the lake or in other areas which appeal to waterfowl. Several styles



of nesting boxes have been built and are being tested. Each is designed for a specific species.

Canada geese are particular about nesting sites, preferring isolated locations. Their nests are not usually within sight of one another. Therefore 15 nesting islands were built about 200 feet apart in the upper end of the Middle Creek lake. Most islands are rectangles about 40 x 100 feet and two feet above the water level. Cross-shaped islands were built to see if they would provide more nesting sites and better success.

To further influence geese to nest, old tires have been placed on the islands and platforms were put on more than 50 tree stumps left standing three feet above the normal water level in the upper end of the lake.

Several styles of nest boxes are being used for ducks. One, commonly used by mallards, is made by placing a layer of straw between two squares of chicken mesh wire, forming a wire-and-straw "sandwich." This is rolled into a cylinder and a semi-circle of wood is installed in each end. Stakes hold the straw cylinders about a foot above the water. Mallards have used most of these nests which are installed near ponds on the area. A few were placed eight to nine feet above the water for wood ducks, but mallards moved into them also and raised their young.

### Several Types of Nests

For wood ducks, several types of nest boxes have been tried. The first were wooden boxes placed two or three feet above the water on a pole. About one-third of these were used when placed near woody or brushy areas. The metal cylinder with a cone top style had a 10 percent usage when placed in woody areas. Yet another wood duck and mallard nest type is being evaluated at Middle Creek. These are made from old tires which are cut, trimmed and formed into the desired shape.

In 1966, preparation for a resident



**APARTMENT-STYLE** wood duck nests provide living quarters for this beautiful species. Made of metal, these last for many years.

Canada goose flock was begun at Middle Creek, when two temporary holding pens and propagation areas were constructed. The following year Commission personnel began collecting "nuisance" geese throughout southeastern Pennsylvania. These included a 72-bird flock obtained from a private landowner. He'd started with a pair of Canadas and the flock grew until he had too many geese for his pond. He called the Commission and asked that the birds be removed. During the molting season when the geese couldn't fly, they were herded into a pen, wing clipped to prevent them from returning to their "home" pond, tagged, banded, and transferred to Middle Creek.

Additional nuisance geese were collected and added to the flock, until today more than 600 resident geese can be seen on the area. Most birds are free flying. The resident flock, favorable feeding and loafing areas, and water attract additional birds. During the fall and spring migra-



**PEOPLE WITH MANY INTERESTS WILL benefit from Middle Creek. These bird watchers spent hours studying the area's waterfowl this spring.**

tions, several thousand birds can be seen on the area.

At the June, 1972, Commission meeting, the Commission adopted new rules and regulations for Middle Creek. A controlled hunting area was established and the entire tract was closed to the hunting or taking of migratory waterfowl until the construction and development of the area is completed and rules and regulations for the hunting thereon of migratory waterfowl are promulgated by the Commission.

Meanwhile, gooseflight patterns will be studied. After these studies are completed, Commission personnel will select locations and build blinds for the controlled hunting area.

### **Similar to Pymatuning**

Waterfowl hunting on Middle Creek will be managed by a system similar to Pymatuning's. Sportsmen desiring to hunt will be required to file an application before a specified date and a public drawing will select those permitted to hunt. Successful applicants probably will be allowed to bring three guests. Hunting will be from blinds, which will be assigned by drawing. Decoys will be used. Little if any pass shooting will be permitted, as this often results in ex-

cessive cripples and losses. Definite hunting days have not been determined for Middle Creek, but Monday, Wednesday, Friday and Saturday mornings may be anticipated. This allows the waterfowl to rest and feed in the area on the intervening days, reducing the cumulative hunting pressure which tends to make waterfowl move on rather than remain in an area.

In addition to the controlled shooting area, several other areas were established. Each is prominently posted. The ridge portion, made up of the original SGL 46 and some fringe areas of the new waterfowl project, makes up the public hunting area. This has been set aside for public hunting of all species except migratory waterfowl during the open season.

No hunting will be allowed in the propagation area which comprises most of the main lake.

During the 1972 hunting seasons, the controlled hunting area will be closed to all entry. This will close the Middle Creek controlled hunting (waterfowl project) area to the early and regular small game seasons and the archery hunting seasons.

In the future, after the season closes for hunting migratory waterfowl, on the controlled area it shall be per-



missible for sportsmen to:

(a) hunt small game during the extended small game hunting season;

(b) hunt deer during the regular antlered, antlerless and late archery seasons;

(c) trap for furbearing animals during the open trapping seasons;

(d) train dogs following the close of the antlerless deer season until March 15;

(e) enter and hike on designated trails on the area.

Control of the hunting at Middle Creek will be through the Administration and Visitor's Center. In addition to a hunter registration area, this building contains offices, an interpretative area, a small auditorium and a wide window area overlooking the lake.

The interpretative area will have displays on ecology, wildlife management, natural history and mounted specimens for wildlife identification. This area has been designed to give visitors a better understanding of the management of the state's wildlife resources.

The auditorium will be used by groups visiting the area. Consideration is also being given to developing presentations on wildlife management to show to visitors.

Other recreational facilities besides hunting will be developed at Middle Creek. Four public use areas are nearing completion and 175 picnic tables will be placed on these areas for visitors' convenience.

Six hiking trails lace the area. Included are a habitat management trail, waterfowl observation trail, a millstone trail, and routes for bird watching and wildlife photography. The Horseshoe Trail, which runs from Valley Forge to Rattling Run, follows the ridgeline through the southern section of the management area.

The fishing area of Middle Creek includes the portion of the main impoundment just south of and adjacent to the propagation area. In the fishing area, fishing is prohibited from the breast of the dam at all times, and, except from the shore and through the ice, from September 15 to May 15, both dates inclusive. Fishing will be permitted from boats or canoes propelled by oars or paddles from May 16 through September 14. Wading is prohibited in the fishing area. Signs will mark those areas open to fishing.

### **Diversity Favorable**

The diversity of habitat found on the Middle Creek area is providing favorable conditions for a great variety of birdlife. Bird watchers, or birders as some prefer to call themselves, have spotted several of the less common hawks and owls and other species of bird life on the area since the Game Commission began game management practices.

Removal of the forested areas and clearing of the brush followed by the planting of grasslands and croplands has provided optimum conditions for the many small rodents which are the primary foods of hawks and owls. All birds of prey have complete protection here, and the area is becoming known for its abundance and diversity of raptors during the winter months.

The spring migration of waterfowl, along with the proximity of lakes and ponds to the roadways, on weekends draws hundreds of visitors who are interested in watching the migratory ducks, geese and swans.

Middle Creek will benefit Pennsylvanians with a variety of recreational opportunities while providing harvestable crops of wildlife. It will be an area for enjoyment by all who like outdoor activities.

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### **Not Meat Eaters**

Deer enjoy a wide range of foods, consisting of grain, acorns, fruit, mushrooms, and various other plants.



GLENN SHIMMEL, THE AUTHOR'S SON, poses with the big 10-point that was taken because he had the necessary patience.

## *Patience, My Friend, Patience*

By Al Shimmel

FROM WHERE we stood, the buck was practically invisible as it lay, belly down, in a depression left by an ancient windfall. Only the damp undersides of the disturbed leaves and a few trifling traces of blood indicated where the buck had fallen. With its final struggles it had slid down the steep slope until it came to rest. The left antler, shattered above the base, matched the broken piece that my friend took from the pocket of his hunting jacket. The intact right antler sported seven even points . . . My young friend looked ruefully at the buck. . . .

Two hours before he had been sitting on the opposite ridge when far below he caught a glimpse of the buck, crossing the little brook that

flowed at the bottom of the hollow. Although the deer was moving in his direction, he began firing as soon as he caught the glint of sun on the polished antlers. The buck pivoted, went down, got to its feet and began to retrace its course up the opposite ridge. When it reached a place near the top it fell again.

I had been standing at some distance, listening to the firing but not knowing in which direction the game was moving. After an interval of silence he called.

A grueling two hours followed in which we literally combed the mountainside, yard by yard. Where the deer had been crossing the stream when the first shots were fired, we found the broken antler and an area



of disturbed leaves. Lack of snow made direct tracking an impossible chore.

Three times we climbed that ridge from the stream to the summit, with only an occasional speck of blood to encourage our efforts. The woodsman's saying, "A wounded deer travels down hill," came to mind. When I put it into words my young friend insisted that the deer was dead, somewhere near the top of the ridge. He had seen it fall. Sheer luck led us to it.

In retrospect, the hunter was at fault in several ways. Even the first shots had been at extreme range for the medium-power, open-sighted carbine he carried. The buck was following a deer trail that angled toward the hunter and passed within easy range of his stand. There was a better than average chance that the deer would have continued his course and given an easy shot and a fine trophy with a minimum of effort.

The shot that finally proved fatal had entered to the rear of the rib cage, just below the spine. The reduced velocity had kept the bullet within the body cavity. The bleeding was internal. Another bullet had cut through the flesh at the brisket. This accounted for the trifling traces of blood found along the trail. The venison had been saved by our labor but the trophy was ruined.

Disregarding the sporting ethics involved, the variables of the situation could easily have cost my friend his buck. He occasionally boasts about the long shot but cool analysis leads to the conclusion that his shot was a pure gamble, the result of youthful impetuosity. Luck and patience

had much to do with finding the animal.

The Home Ridge is not noted for its trophy size bucks. Over the years, because of constant hunting pressure, the average has been young bucks sporting light 4- and 6-point antlers. During the autumn we discovered a fine animal, the largest seen in a number of years. He frequented a certain hill orchard that lay against the woods. Even here he seldom ventured more than a few jumps from cover. Few knew of his existence.

### Two Shots Passed

Twice during the archery season I had a good view of him but passed up the shot rather than take a chance of wounding so fine a specimen. Several rural roads cross the area. At the top of the ridges is a plateau in the form of a laurel thicket that covers about seven acres. The trees are scattered rock oak and jack pine. My son and I have stands that guard both the eastern and western edges of this thicket. The first flurry of opening day activities sends deer into this thicket to escape the wandering hunters who patrol the ridges or occupy stands overlooking the slopes below. We felt sure that the big buck would seek this refuge. Our only anxiety was that some hunter might intercept him on the way.

My son's stand is at a crooked oak, just high enough to command a view over the laurel tops. Trails from three directions converge here. My place is on the western edge, where I can watch a shallow bench that circles the thicket and leads to an area of slashings beyond.

Three times during the morning one or the other of us had glimpses of antlers as the buck slipped from one hide to another, but there was no opportunity for a clean shot. We waited with as much patience as we could muster. I saw at least a dozen hunters move along an old forest trail within a hundred yards of my stand.

*Give*

## GAME NEWS

*To a Friend . . .*

Small wonder that our wily buck was restless.

The milling hunters were probably responsible for the action that sent the buck bolting toward the slashing. He passed directly in front of my son's stand. A 10-point buck that dresses out at 160 pounds is a decent trophy anywhere in whitetail country. In our marginal hills it is exceptional. . . . Eight hours is a long time to hold a deer stand.

In early January I was exploring the area on snowshoes. A half mile beyond our stands is a shallow notch between the ridges. As I passed a laurel thicket my eye caught the fork of an antler protruding above the snow. I used one of my webs as a shovel to clear away the snow. This buck had a 10-point rack although it lacked an inch in spread and the evenness of my son's trophy. There were indications that the fatal bullet had entered behind the rib cage, allowing the animal to escape and die. Some hunter had bungled and lost a fine trophy. Under what circumstances, we can only guess. Perhaps it was lack of patient and persistent trailing.

My father had a unique method of hunting cottontails. Ammunition was not plentiful then. It was not to be wasted. Every advantage that did not violate his strict code of sportsmanship was permissible. We hunted on newly fallen tracking snow. We fol-

lowed a track with our eyes as far as possible before moving ahead. Where the rabbit fed and played there was a tangle of tracks that was impossible to separate. Here we backed off and circled slowly until we found an outgoing trail. Occasionally, our game squatted within the circle. The object was to see the game before it became alarmed. This required slowness of movement and intense concentration. One of the rules was that the animal must not be killed within five yards of its squat.

Once the animal was located the hunter tried to maneuver slowly into such a position as to command a clear shot as it dashed away. Scores were kept and expended ammunition was checked against game brought to bag.

Occasionally, in spite of skillful stalking the animal was able to slip away without offering a shot. If there were several other trails at hand, the animal was allowed to go unmolested. If game was scarce the cottontail was allowed an hour to forget its fright and find a new hide. When hunted a second time it was more alert and presented a greater challenge.

This method of hunting required much time, intense concentration and above all a patience that developed self discipline. Quick and accurate gun handling resulted from this intense training.

From cottontails it was a natural step to grouse. They were abundant. We soon learned to pussyfoot along

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## Booklet on the White-Tailed Deer

All persons interested in deer will find the booklet, "The White-Tailed Deer in Pennsylvania," of great interest. Written by Stanley E. Forbes, with the assistance of Lincoln M. Lang, Stephen A. Liscinsky and Harvey A. Roberts, all wildlife biologists, this publication gives a great deal of information which formerly was unavailable to the general public. The whitetail's clan, home, enemies, conflicts, benefactors and predicted future are covered. General topics include growth rates, antler development, reproduction, population structures, sex and age ratios, reproduction potential, and similar topics. This 40-page booklet may be ordered from the Pennsylvania Game Commission, P. O. Box 1567, Harrisburg, Pa. 17120. Price is 50 cents delivered.



the grass-grown woods roads and the wooded edges where wild grapes climbed from rail fences into branches of the timber. Morning and evening found the feathered rockets feeding there. We startled to the thunder of their rise and when we chanced to catch a bird silhouetted against the sky as it passed between the trees, and drop it with a shot, the thrill remained. We became confirmed seekers of the king of feathered game.

### Grouse Stalking

We practiced another method of grouse hunting that tested both skill and patience. During periods of stormy weather when grouse sought the cover of pine thickets, we sought them with a rifle. Three nearby groves had been seeded by parent trees that grew on the windward side. The ground was like a velvet carpet with fallen needles and the lower branches had died from lack of light. We stalked from tree to tree and searched for the grouse that perched, high above, close to the trunks. To find a bird before it took flight was an art in itself. This was rifle country and only head shots were permitted. The dim light that filtered through the thick pine tops tested the eye and skill of the marksman to the limit. The law at that time was more generous than now, but it was seldom that even a skilled rifleman brought home more than a brace of birds. The odds were with the grouse. . . .

My friend and I watched the big gobbler run a full 20 yards before he became airborne. The hens had leaped into flight and were threshing upward through the pine branches before he had gotten off the snow. The beard that decorated his bronze-black breast held my attention. It was a span in length and thicker than my thumb.

This was the sixth week we had backpacked corn through the snowy woods to fill the empty feeder. We had built it during the Christmas holi-

days. The turkeys found it immediately but this was the first glimpse we had of the sultan and his harem. We measured the big track in the snow. It was  $7\frac{1}{4}$  inches long. Who would not covet such a bird?

Dedicated turkey hunters are almost as secretive as the bird they



**THESE FOUR RACKS** were taken by Glenn Shimmel on successive opening days. The small ones are typical of bucks from the area, but sometimes a big one is collected.

hunt. But my friend, although an outdoor and nature enthusiast, was not a hunter. It was a foregone conclusion that he would talk about the big gobbler.

I was not mistaken. During the spring season the area received more than its share of attention. Several lesser gobblers were bagged but the prize bird was elusive as a phantom. Disgusted, I turned awhile to other hunting grounds.

Gray dawn of the last day of open season came slowly, held at bay by a deepening overcast. The windfall beside which I crouched overlooked a spring-fed glade. Under the big oaks were sparse thickets of witch hazel. Just as I reached for my cedar call, three plaintive yelps of a lonesome hen sounded from the ridge a short distance to my left. After what seemed a long time an answer came



**SHIMMEL HAD SEEN** the big gobbler before the season and hoped to keep its location a secret, but it was Alvin Shaw, above, who said, "Get your camera!"

faintly from far across the hollow.

Why is it that when trying to sit still invariably an inconvenient itch develops or a spider crawls across your cheek? The urge to scratch or brush becomes a nightmare.

A slight noise along the brook attracted my attention. My pulse began to pound. A movement—an old raccoon—bedraggled and slabsided, climbed the bank. She nosed about. Complaining to herself, she wandered up the hill. No doubt demanding young waited in some hidden den.

I turned my eyes to search the flat and just outside the farther thicket stood the gobbler. There was no mistaking the black silhouette, although it was beyond range. He moved a few steps, then stood, eyeing his surroundings suspiciously. Twice he drooped his wings and partly raised his tail as if to strut, but changed his mind and once again became a sleek dark image against the greening thicket.

He took a few steps forward. My hopes were growing. I gripped my gun a little tighter. Then, all at once, the overcast opened and my vision

was obscured by rain. When the first fierce downpour slackened I saw the big bird slip into the thicket, headed back in the direction of the ridge.

A movement caught my eye. Another hunter moved along the hill. It had been his call that I had mistaken for the hen. He crossed the brook and I recognized him as he passed. He was one of the best turkey hunters in the area. The secret was out.

But no one shot that gobbler in the spring season and during the following fall I had two glimpses of the bird. Once he crossed the road just after shooting hours. Another time I saw him running along the ridge, far out of range.

When spring season came again, my hopes were high. Then, late in the first week, a knock came at my study door. My friend the veteran turkey hunter stood there, grinning from ear to ear. "Get your camera," he said. . . .

The rifle cracked sharply, cracked again. Silence. Then, "I got him."

I got up stiffly and walked over to the gulley where my companion was bending over a 7-point buck. "I thought I missed him until he piled up." He grinned. We looked at the bullet holes. One was just above the brisket, penetrating lengthwise, while the other had broken the shoulder, low down. The span between his thumb and first finger could touch both wounds. I congratulated him on the excellence of his shooting. Although the range was short the buck had broken from cover, running hard.

It had been early morning when we spotted the buck and two does entering the cover. A lumbering operation had cleared the top and each end of the bench. What remained was a jungle of scraggly oaks tangled with wild grapevines and decaying windfalls. Here the deer had taken refuge.

Only two exits led from the cover. The gully dropped down to rhododendron thickets bordering the creek



far below. On my side a tangle of downed tops led into a rocky jumble left by some ancient convulsion. I had been sitting on a stump that overlooked the tangle. The remainder of the ridge had been clean-cut. The deer were boxed in the thicket of the bench. We were content to wait.

It was better than four hours since we had taken our stands. Occasionally we could see shadowy forms as they moved restlessly, but they were so well hidden that shooting was impossible.

Deer will skulk for hours in heavy cover if they feel they have escape routes open. But if the routes are blocked they become restive under confinement and eventually panic. When they attempt an escape, they either move very slowly and fugitively or they dash out, relying on speed to take them away safely. In the first instance the hunter may have a ridiculously easy shot. If they come out at a run it requires a cool head and steady hand to bring down the venison.

The average hunter, accustomed to the precise time schedule of office or factory, is not very well conditioned for many hunting situations. Accustomed to activity, he consults his watch, fidgets and complains at the slowness with which time passes. If he sticks to his post, and few do, he works himself into such a state of nerves that when the climax comes he is almost certain to bungle his opportunity.

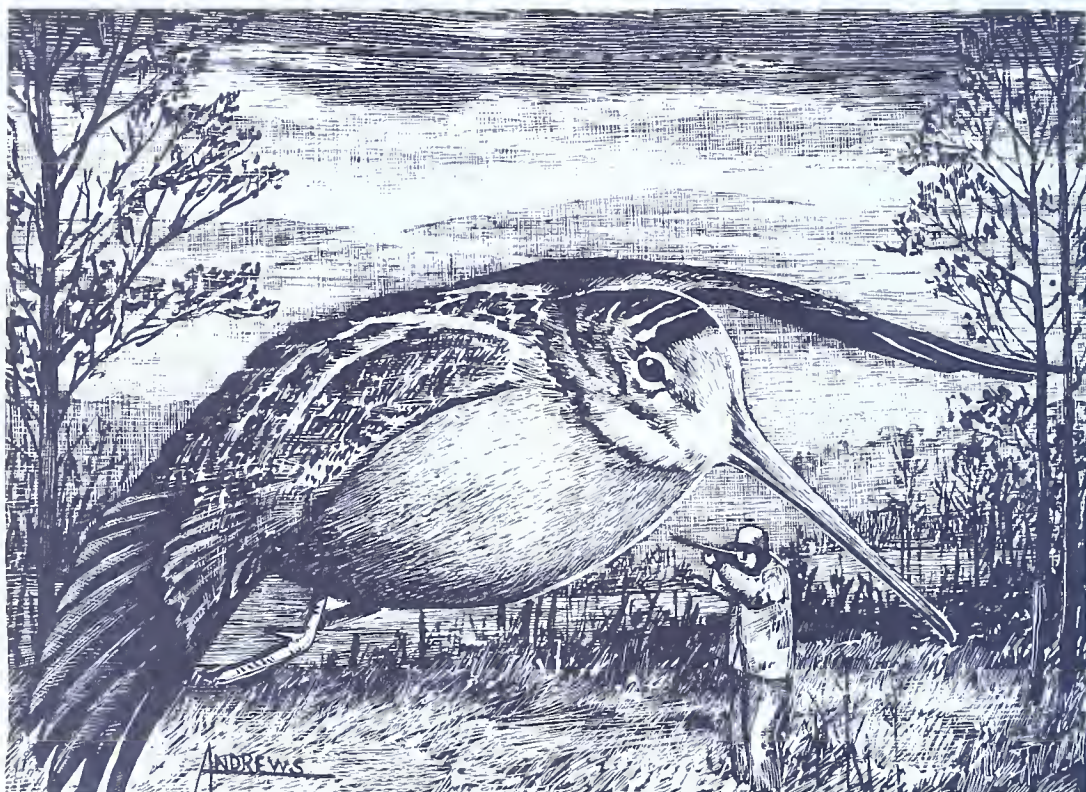
Another mistaken philosophy of many hunters is to feel that the greater area they can cover in a given time, the greater the opportunity to see game. The expert hunter moves slowly into territory where game is known to be, then makes himself as inconspicuous as possible. It is a well known fact that game often approaches a hunter when the hunter cannot approach the game. Curiosity has proved the undoing of game as well as humans. To acquire proficiency in any sport requires practice, study, common sense, and, above all, patience, my friend, patience!

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## Book Review . . .

### Truby's New Book on Silencers

GAME NEWS contributor Dave Truby has plunged into an area where most gun writers fear to tread—the shadowy region of silencers, snipers and assassins. Yet these subjects, unpalatable to many, are legitimate for the researcher, and Truby has proved himself an expert at digging out facts in a fascinating nether world. Private ownership of silencers has been prohibited in the U.S. since 1934, but the military, security and espionage agencies of the world's governments have not been so restricted and these are the organizations which have taken advantage of the silencer's—or "noise suppressor's"—characteristics. Truby discusses the mechanical and technical details of these items—even fills an appendix with patent data—and there are many photos of silencer-equipped weapons. But it is the stories, usually of their clandestine use, drifting back from the battlefields of the world, that will keep readers turning these pages. Silencers were used in World War I, and in Vietnam, and in many places in between—even in the White House!—and anyone who wants to know about them will find a lot of answers in this book. (*Silencers, Snipers & Assassins*, by J. David Truby, Paladin Press, P. O. Box 1307, Boulder, Colo. 80302. 209 pp., 8½x11, hardbound, 1972. \$15.95.)



## Hunting In The Clouds

By Sam Hossler

**P**LAN HAD BEEN made over a month earlier, and we really had no way of knowing if the birds would still be in their covert now. We hoped they would. When I speak of birds in this article, incidentally, the only thing that should come into your mind is woodcock. My hunting partner Harry, Lou, who is an exclusive timberdoodle hunter, and I had done the planning. Lou has been retired for some years now and devotes most of his time and energy to the training and advancement of woodcock dogs. In fact, my Brittany came from his kennel. Harry and I try to make at least one trip with this dean of buzz-bomb hunters every year. To us it's the highlight of the upland gunning season and we look forward to the trip all year long. As I said, the plans were made and now it was a question

of whether a hard freeze would come in and push the birds south before we got together.

The day finally arrived. Driving over the Allegheny Mountains, clouds enveloped everything, cutting visibility to almost zero. Any bird that would try to fly in that soup without radar would have his work cut out for him. Due to the fog we were a little late arriving in Windber, a small place near Johnstown in Southwestern Pennsylvania. Lou was ready and we transferred our gear to his car and drove out to his kennels where Snuffy and Hilga were waiting. These two little Brittany's are sisters of my dog but you would never know it as they are small-boned and slight of stature where mine is large-boned and heavy through the back and chest. Lou was using only Snuffy today as



he wanted to show how well she had come along since last year.

Turning down a dirt road we wound through mountainous country that looked more like deer and turkey cover than anything a woodcock would take up housekeeping in. Down one side of a mountain and up another, we drove around a ridge and parked beside what was normally a beautiful little run. It was a roaring torrent now as we'd had six days of straight rain. No really cold weather had set in as yet so we felt confident the birds would still be in the area.

Lou maintained that the flight birds, moving south on their migratory flight, already had been through and only a few of the hangers on were left. I'd been watching the Canadian weather reports and had not seen anything that would force them out of their northern feeding grounds. This observation caused a slight discussion. But what chance do you have against an expert? As earthworms are the basic source of their diet, when the ground freezes woodcock must move on as their long bills can't penetrate the hard earth. Anyway, Lou felt we could find some birds and that was all we could ask.

It was drizzling now and looking around I could see the clouds clinging to the mountaintop above us. This didn't bother me as everyone knows the timberdoodle is a bottomland bird. It will on occasion stay around the sides of a hill but is never found on top of mountains. These tops were showing as 2800 feet on the topographic map we had, and for Pennsylvania that's pretty high. We worked down along the creek through thickets which should have held birds, but flushed nothing.

Finally, just as we were about to give up on this place, Snuffy had a point. With Harry on the right and me on the left, Lou went in to flush the bird. Nothing moved. Snuffy started walking on eggs and I was sure we had a grouse moving ahead of the dog. In about 25 yards she hit

a point again. Her little tail was quivering with excitement and I thought her eyes would bug out of her head as she stood frozen to the tantalizing scent. This time the bird did flush when Lou moved in and to my surprise it was not a grouse but a woodcock which broke right straight across Harry's head. His 20-gauge cracked once as the bird darted out of sight around a large pine tree and crossed the creek. As there was more water coming down this little stream than any of us cared to negotiate, we decided he was safe over there.

### Close to the Clouds

Lou led us gradually upward and before I was aware of what had happened we were close to the clouds. A little grove of saplings lay ahead in a field of high grass. Now no timberdoodle would be caught dead in a place like that. We had no sooner started in, me on the left, Lou and the dog in the middle and Harry on the right, when I just about stepped on a bird that made the mistake of trying to make a 180-degree turn to my side as he flushed and gave me all the room and time I needed for a clean shot. Lou brought the dog over to retrieve the bird and we continued on.

Snuffy was working over by Harry when she practically bent into a pretzel, holding a point not a dozen steps in front of him. Lou called me over and we all took our positions. In this light cover it would be impossible not to collect number two. At the flush, the bird cut right. Harry's 20 gauge spoke. Then back left and Lou's 16 gauge cut loose. The bird continued past me and my 16 gauge L. C. Smith spat number 9 shot at him. The bird continued to climb, turned to the right and headed directly into the fog as my second barrel blasted its load harmlessly and the impossible-to-miss bird disappeared.

We were soon out of the saplings and walking across the open field when Snuffy again came on point.

Again, we missed. It's hard to believe that three hunters with probably 100 years of combined shooting experience could miss open shots like this, but we did. Lou calls them baseball shots and they sure should be as easy to hit as a baseball. Our only excuse was that it was raining much harder now and the water was trickling down my back sending cold shivers through me. I realize that's not much of an excuse!

We were in the clouds now and it was not nearly as dense as I had expected. You could see for almost 25 yards—not well, but a bird would be visible for that distance. A blackberry thicket was dead ahead and Lou advised he had put birds out here a week previously. Snuffy didn't disappoint us. She had three more points and all of us burned up more shells than we care to admit, with not a feather to show for it.

It was nigh on to lunch time and we were working down toward the car



**WE'D HAD SIX** days of straight rain but no cold weather had set in yet so we felt confident the birds would still be in the area somewhere.

when Snuffy pointed ahead of us. The wonderful part of these points was the birds were holding until we all got into position. Even with our thrashing around to get through thickets or brambles they never flushed wild.

This bird was no exception. It held until Lou put it out. With the customary whistling of wings it twisted and climbed in front of Harry, heading for tall timber. At the top of the climb Harry's 20 gauge spoke and the bird faltered. I was so busy yelling "The bird's hit" that I didn't even shoot. We marked it down—he hadn't actually fallen but kept on flying for a short distance in that crazy gyrating pattern they use. To my surprise, Snuffy made the point right where I had marked the bird down, among some thick tangles of blown down trees. We all thrashed around trying to get through. Snuffy held the point and the bird didn't flush. Finally, Lou saw the bird not two feet in front of the dog's nose. It just sat there and Lou actually bent down and picked it up. Harry's shot had hit it and it couldn't make it any farther. Without a dog we would have never found this bird.

### Missed Again

It was only a short walk to the car now and we followed the creek bottom back. Two more flushed along the creek bank thickets without results. I missed a going away shot I should have been able to hit with a handful of gravel.

Huddled in the car with a soaking wet dog and dripping clothes we ate lunch then drove to a new spot. Everyone was reluctant to leave the warmth of the heater which was trying to dry us out. The water had penetrated to our skivvies and uncomfortable was not the word for it. A small patch of woods was our next objective and slowly we started into it. Snuffy worked like the pro she is, never taking notice of the weather. When Lou called, "Point," he and



Harry were next to the dog and I didn't even bother to go down and take up a position. Lou got a straight away shot and neatly folded his first bird. One apiece. Not much of an average for the amount of shooting we had been doing, but as all hunters know, some days are like that.

Not 40 yards more and Snuffy had another point. I was still quite a long way from her so I bulled through the underbrush and came out in a little clearing. The dog was on the opposite side, holding a point that should have been recorded on film. But the weather was against that. As Lou moved in, the bird flushed—not a woodcock this time but a grouse. It gave me a perfect crossing shot in the open. If I hunt for 50 more years I won't have another shot like that one. The improved cylinder barrel cracked first, then the modified. Would you believe it, that bird had the audacity to keep right on flying. Moving back toward the car Snuffy pinned another grouse but it was on

Harry's side and I didn't have to embarrass myself by missing again.

One more stop and Lou said, "I know there are birds here and our shooting is bound to improve." We crawled out of the car like drowned rats and worked this new patch. As usual Snuffy was superb and we all burned up more ammunition—uselessly.

"I know another spot," Lou said. "It's just around the bend."

More dead than alive, we worked through it until I couldn't go another step. Our soaked clothes weighed a ton and I proclaimed that I was through, I was going back to the car. Everyone agreed and so ended another successful timberdoodle expedition. For us, the number of kills is not what determines a good hunt. We're interested in the number of points and how well the dog works. On this trip we'd had 20 points and the dog worked magnificently. That there were only three birds in our game pockets was immaterial. It was a great day—rain, clouds and all.

# Records Booklet Given With Subscription

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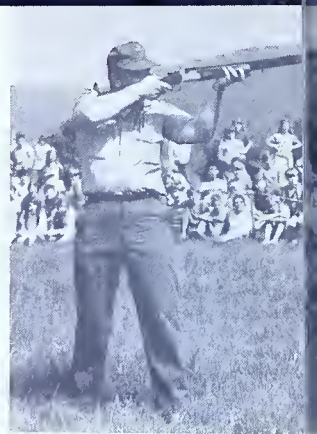
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## Lycoming Sports

**E**ACH AUTUMN since the founding hills district Lycoming County Consolidated has given an extensive program to the community. Seventy sportsmen and women give instructions to 1000s on boating safety, poisonous plants, and other outdoor subjects. The program was held on September 20 and 21.







## n Association

the trees on the sur-  
r glorious color, the  
portsmen have presented  
de students of the area.  
Commission employes  
daily in gun handling,  
urchery, trapping, and  
program will be held

BC Photos by Ralph Cady





# FIELD NOTES



## Survival Instinct

**GREENE COUNTY** — Andrew Ewart, a Food and Cover employe, was working at State Game Land 179. Andy was sowing millet around a beaver pond for duck food when he noted a doe and her fawn coming toward him along the pond. When the deer sighted him, the doe turned and ran into the brush and the fawn dropped into the water to a level that only its nose and eyes showed. Andy went for his camera and upon returning the fawn was on its feet and running. This was not a case of mammals going aquatic, but it shows that nature works in strange ways to protect its young.—District Game Protector R. W. Oliver, Carmichaels.



## Understanding People

**VENANGO COUNTY** — Quaker State Oil keeps thousands of acres open to hunting, and this past month while bulldozing a road through the woods to a new drilling site, they came upon two hen turkeys nesting in the path of the bulldozer. Now the new road has a large detour, not originally planned.—District Game Protector L. E. Yocum, Oil City.

## Water and Wildlife

**JUNIATA COUNTY** — The flood of '72 without question caused death and destruction to thousands of specimens of our wildlife species. While on duty during the height of the flood, I saw ringnecks which were unable to fly and soaked rabbits scrambling to safety. Groundhogs drowned in their burrows and are seen floating in many backwaters. Fawn deer were swept away and drowned. Heavy cover along stream beds, the usual sanctuary for much wildlife, now became a treacherous trap and many animals and birds were lost. At one time I observed a large blacksnake and a large rat both trying to gain access to a floating window, but both were swept away by the water. As the water receded many fish were trapped, even on main highways and inundated fields, to die. Rabbits, ringnecks, opossums and racoons were hard hit. — District Game Protector R. P. Shaffer, Mifflintown.

## Not Very Friendly

**ROSS LEFFLER SCHOOL OF CONSERVATION** — While walking through an old apple orchard near my home in Clearfield County, my attention was drawn to a pile of dirt at the base of one of the trees by a rabbit running around it. I took a closer look and saw a robin sitting on top of the dirt and three rabbits taking turns running up and kicking dirt on it. After a few minutes of this treatment, the robin flew away, probably disgruntled at the ill manners of his playmates.—Trainee Cortes Lynn Keiser.



## Fine Cooperation

**CHESTER COUNTY**—On June 24, I received a telephone call from the Spring City Police, stating that approximately 35 oil-soaked Canada geese were sitting on the road and in the fields at the Pennhurst State School. Deputy Frank Holden and I investigated, and with the cooperation of the police and 10 Boy Scouts from Spring City, we removed the geese to the Eastern Game Farm, Schwenksville, where the oil was removed and the geese cared for. Much credit must be given to the Spring City police and the local Scout troop for their welcome assistance. Despite the fact that the police had more than their share of flood duties to perform and the Scouts were helping them in any manner possible, they still took the time to show their compassion and concern not only for the human suffering at the time, but for the wildlife as well. I take my hat off to them.—District Game Protector E. J. Fasching, Elverson.



## Just Tidbits

**SOMERSET COUNTY**—While fishing in Kooser Park Lake, Deputy George Russ of Rockwood observed a muskrat swimming along the shore line feeding on the eggs and cheese dropped by fishermen.—District Game Protector E. W. Cox, Somerset.



## Something To Remember

**BEDFORD COUNTY** — To keep birds from stealing your cherries or berries, hang a paper or a plastic great horned owl near the fruit. Change the location every day. These decoys can be obtained from local sporting goods dealers.—District Game Protector T. C. Barney, Everett.

## Should Give 'Em Wings

**SCHUYLKILL COUNTY** — During late May and early June, about 70 percent of my road-killed deer were last year's fawns. Apparently the does, getting ready to have a new crop of fawns, neglected to instruct them on the proper manner to cross a highway.—District Game Protector S. Opet, Tamaqua.

## Big Attraction

**FOREST COUNTY**—Pennsylvania's deer population is of interest not only to deer hunters but also to the non-hunting public. My wife, who has been working part time in a sports store, tells me that many people stop to inquire where they can see the most deer in the Tionesta area. One family told her they had traveled over 2000 miles to see the deer in Pennsylvania. — District Game Protector E. Taylor, Tionesta.



### Loud Disappointment

**ERIE COUNTY** — While on patrol I heard several loud shots, so left my vehicle and proceeded on foot through a marsh in the direction of the shots. After wading through knee-deep water and getting covered with mud and insects, I broke out into a field and found the shooter—a propane cannon for scaring birds.—District Game Protector A. Martin, Erie.

### They Grow On You

**SCHUYLKILL COUNTY** — I received a telephone call from a Pottsville area resident, stating that their terrier had carried six strange animals to their house. Upon arrival at the residence, I found six newborn orphaned skunks then nursing with four small Angora kittens. When I returned three weeks later to check on them, the wife had decided to get rid of the kittens and keep the skunks.—District Game Protector F. M. Spancake, Pine Grove.

### Not Choosy — Just Hungry

**FOREST AND WARREN COUNTIES**—With about a hundred bluebird houses in use, we find raccoons have changed their diet in these areas to bird delicacies. Now we have to erect climbing deterrents on the trees if we expect any survival.—Land Manager D. Gross, Marienville.

### Good Neighbors

**CUMBERLAND COUNTY** — Due to the heavy flooding in June, many wild animals moved to higher ground because their natural homes were swamped by the rising creeks and rivers. A gentleman called me to his home because a skunk had taken refuge in his garage, which was the only place in the area that was high and dry. The owner let the refugee keep the temporary quarters for several days. In another instance, a boy swam a swollen creek to rescue a fawn. Even though the youngster's home was totally flooded and in a turmoil, when I picked up the fawn it was occupying the only dry spot in the house.—District Game Protector J. P. Filkosky, Mechanicsburg.

### Retriever Trial

The National Amateur Retriever Club's Championship, held on the Pyramtuning Waterfowl Area June 20-23, was an outstanding affair. The nation's greatest retriever dogs participated. Their owners were most liberal in their praise of the contributions made by the Game Commission personnel and for the ideal trial grounds.—C.I.A. R. D. Parlamen, Franklin.

### The Hard Way

**ROSS LEFFLER SCHOOL OF CONSERVATION**—We recently had a class on poisonous snakes of Pennsylvania, with District Game Protector Norm Erickson as instructor. At the conclusion of the class, we were permitted to handle some of the live rattlesnakes Mr. Erickson had brought along. Finally, I got up enough nerve to pin a snake behind the head with a stick and grasp it. When I asked Mr. Erickson if I had the correct grip, he replied jokingly, "Take away the stick, you'll know in a second."—Trainee John E. Schweitzer.





### Wandering Bruin

**ADAMS COUNTY** — On May 29 about 7 p.m. I received four reports of a good-size bear on the Game Lands near Heidlersburg. The next morning a bear was observed by several persons in the vicinity of Idaville, and later that afternoon it was seen near Goodyear, heading for the South Mountain. I figure he traveled about 20 miles overnight if this was the same bear.—District Game Protector S. K. Weigel, Arendtsville.

### Touchey

**HUNTINGDON COUNTY**—While fishing Standing Stone Creek north of Huntingdon near Black's Bridge, Tom Todd experienced an event which perhaps no other Stone Creek angler can par. Tom hooked a trout and while working same a floating "log" diverted his attention. The log turned out to be an aggressive adult beaver which wanted no part of Tom in its domain. After several false attacks with its teeth bared, Tom decided he wanted no part of the beaver either. A reasonable explanation of the action would be that this "hydrologic engineer" was what is commonly known as a "bank beaver" and it had kits nearby, even though Stone Creek isn't noted for a high beaver population.—District Game Protector R. D. Furry, Huntingdon.

### Sounds Good

**FRANKLIN COUNTY** — The fawn crop in this county looks good. In June I had six fawns turned over to me for various reasons. Of the six, five were males and one was a female. Most of these were found in the farming area of the county. All indications point to plenty of deer and a good deer season. — District Game Protector R. E. Schmuck, Greencastle.

### Dedicated

**LEBANON COUNTY**—The flood of 1972 will be a memory, or a topic of conversation, perhaps forever, but on Friday, June 23, I observed two young groundhog hunters in the Sehaeffers-town area early in the morning, and later I observed several fishermen.—District Game Protector P. A. Hilbert, Cleona.



### Takes Work Seriously

**CRAWFORD COUNTY**—Mrs. Roy Barges, RD, Linesville, a new cooperator in the day-old chick program, was worried about how her chicks would spend their first night in her brooderhouse. She solved this problem by putting a cot in the building and staying with them all night. Not much rest, but peace of mind.—District Game Protector L. V. Haines, Linesville.

## The Flood of '72

### — Close Up

**COLUMBIA COUNTY**—On Thursday, June 22, I was awakened long before daybreak by the constant wailing of sirens. We'd had severe rains since early Wednesday morning, so I thought perhaps some flooding was taking place in Bloomsburg. A short time later a U.S. Army helicopter flew over my home and landed at Bloomsburg State College, just one block away. Hurrying there, I found an evacuation center already set up and this twin-engined turbo-propped Chinook helicopter, capable of carrying 40 adults, was in the process of lifting stranded persons from already flooded sites in Bloomsburg. When I approached the craft, which had been flown in from an area post near Harrisburg, I was greeted by a crew chief who turned out to be Edward Trexler, son of Roy Trexler, chief of the Game Commission's Information and Education Division. The other crew members were pilots Bud Manton and Larry Martin and crew chief Marvin Clemens.

I boarded the helicopter and we headed for the lower end of Bloomsburg to find two State Policemen and one National Guardsman who had been swept away on their 2½-ton four-wheel-drive truck while trying to save a man floating on a refrigerator. All three, very wet and cold, were safely lifted to the chopper by a cable and rope sling. By afternoon we needed fuel for the chopper and radio calls located some at the Wilkes-Barre airport. At this time the Susquehanna River was within its banks, but Fishing Creek and all creeks in Columbia County had already caused several million dollars' worth of damage to bridges, homes, trailers and roads.

Returning to Bloomsburg after refueling, we were told over our radio that a young girl had been washed away at 6 a.m. after the auto she was in was rolled off the roadway near

Elysburg. It was now near 8 p.m., with a very low ceiling, and a driving rainstorm continued as we approached the area. We could not locate the girl, so landed in a nearby field to talk with two local policemen who told us where we might find her. Hovering over large trees, we turned on our spotlight. We were also guided by powerful lights from a hillside nearby. We finally saw the girl clinging to a tree in swirling waters. We maneuvered in about 100 feet above her and Ed Trexler again lowered the cable and sling from a trapdoor in the bottom of the chopper. The large rotor blades just missed the trees—in fact, it broke off some of them with its gushing winds. With Ed directing the two pilots over the intercom, the cable was lowered directly to her. She managed somehow to get one leg into the sling and hold on until she was winched into the chopper, where she immediately passed out. A radio call brought an ambulance to meet us at the college and the girl was hospitalized.

It was completely dark as we landed and had we been just a few minutes later arriving, the girl certainly would have been lost. She had been swept over one-half mile from the roadway and clung to the tree for 14½ hours and still was able to hold on and be lifted high into the chopper. Her endurance was incredible.

I had previously worked the Stroudsburg area after the hurricane in 1955 and thought I would never see such destruction again, but how wrong I was. Starting on Friday, the day after this disaster, the Susquehanna River made its rise. Far exceeding the 1936 and 1904 floods, it now inundated a large portion of Bloomsburg and most other cities and towns along the river.

I shall never forget the rescues mentioned here, and much credit must be given to the skillful Vietnam veterans who manned the chopper.—Land Manager W. E. Fulmer, Bloomsburg.





# CONSERVATION NEWS



By Ted Godshall



## Responses to Duck Hunters' Questionnaire

**WE RECEIVED** 580 responses to the duck hunters' questionnaire published in the April GAME NEWS. Most of those replying requested a mid-October opening date for this year's duck season and a late-December or early-January closing date.

Responses to other questions were as follows: 62% preferred a split season, 38% a straight season. Of those preferring a split season, 37% asked for a two-week opening period, 34% a three-week period, and 28% a one-week.

Almost two-thirds of those replying—62%—said they do most of their duck hunting late, with 37% preferring to hunt early; 47% usually hunt from a

blind with decoys, 29% by walking up and jump shooting, and 23% with a sneak boat or other floating device.

Of those who responded to the questionnaire, 39% lived in the Northwest Division, 30% in the Southeast, 13% in the Northeast, 11% in the Southcentral, 5½% in the Northcentral, and 1½% in the Southwest.

The 580 duck hunters replying hunted a combined total of 6783 days and took a combined total of 4985 ducks.

We want to thank everyone who responded to this questionnaire. Your efforts have provided information which will be highly useful to the Game Commission.

# National Hunting and Fishing Day



**FOR MANY YEARS** hunters and fishermen have been in the vanguard of efforts to halt the destruction of our land and waters, President Nixon says.

**P**RESIDENT NIXON has designated Saturday, September 23, as National Hunting and Fishing Day in recognition of the role of sportsmen in conservation and outdoor recreation.

Pennsylvania has had two Outdoor Sportsman Day celebrations, but the idea really caught fire when Congress

adopted a joint resolution calling on the President to declare the fourth Saturday of each September as National Hunting and Fishing Day.

The President pointed out that for many years responsible hunters and fishermen have been in the vanguard of efforts to halt the destruction of our land and waters and protect the natural habitat so vital to our wildlife.

He went on to note that through a deep personal interest in our wildlife resources, the American hunter and fisherman have paved the way for the growth of modern wildlife management programs. In addition, his purchase of licenses and permits, his payment of excise taxes on hunting and fishing equipment, and his voluntary contributions to a great variety of conservation projects are examples of his concern for wildlife populations and habitat preservation.

President Nixon said, "His devotion has promoted recreational outlets of tremendous value for our citizens, sportsmen and nonsportsmen alike. Indeed, he has always been in the forefront of today's environmental movement with his insistence on sound conservation programs."

The President, in recognition of the many contributions of the American hunter and angler, urges all citizens to join with outdoor sportsmen in the wise use of our natural resources and in insuring their proper management for the benefit of future generations.

In connection with the Presidential proclamation, the Pennsylvania Game Commission is urging every hunting, fishing and conservation club in the state to hold an open house for the public on September 23 to dramatize sportsmen's contributions to conservation and to introduce the public to outdoor skills.

## *Prolific*

Female meadow mice are capable of breeding at four weeks of age and can produce litters of five to nine offspring every three weeks.



## Days of Yore



"BIG BUCK CAMP" ON SOUTH MOUNTAIN, near Shippensburg, was scene of this 1929 photo from Boyd Diehl, New Cumberland. Front row: Shapie Coy, — Farner, unknown, Bill Diehl, Paul Kelly, Huber Coy; middle row: Charley Chamberlain, John Coy, Dice Hancock, Charley Lightfoot, unknown, "Punk" Coy, — Rosenberg; back row: "Chubb" Friedinger, unknown, Jim Starrett, Sam Kelly, unknown, Harvey Coy, "Nobe" Kelly, unknown, Charley Coy, Ernie Hancock, Bill Coy. Girl on porch, "Lulu" Hancock Burkholder.

### *Books in Brief . . .*

**Cartridges of the World**, 3rd. ed., by Frank C. Barnes, edited by John T. Amber, Digest Books, Inc., 540 Frontage Road, Northfield, Ill. 60093, 1972. 378 pp., 8½ x 11, paperbound, \$6.95. An outstanding reference work on over 1000 rifle, shotgun and handgun cartridges—both current and obsolete, of American, British and European development. Covers their history, ballistics, case dimensions, reloading data, etc.

**The Survival Handbook**, by Bill Merrill, Winchester Press, 460 Park Ave., New York City 10022, 1972. 312 pp., 4½ x 7½, \$5.95. An expert gives detailed advice on overcoming emergencies in all outdoor areas.

**Pesticides and Your Environment**, National Wildlife Federation, 1412 16th St., Washington, D.C. 20036. 20 pp. handbook, single copies free. A how-to-do-it handbook for home gardeners who want to control pests without pesticides.

**The World of the Moose**, by Joe Van Wormer, J. B. Lippincott Co., East Washington Square, Philadelphia, Pa. 19105, 1972. 160 pp., \$5.95. Latest in the Living World Series edited by John K. Terres. Good photos and informative text on the largest member of the deer family.

COMMONWEALTH OF PENNSYLVANIA  
HUNTING LICENSE APPLICATION  
CERTIFIED CHECK OR MONEY ORDER  
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Check Type(s) Desired

Resident Adult (17-64 years of age)	\$6.70	<input type="checkbox"/>
Resident Senior Citizen (65 years and older)	\$5.20	<input type="checkbox"/>
Resident Junior (12-16 years of age)	\$4.20	<input type="checkbox"/>
Non-Resident	\$40.35	<input type="checkbox"/>
Alien	\$40.35	<input type="checkbox"/>
Archery	\$2.20	<input type="checkbox"/>
Non-Resident 3-Day Reg. Shooting Grounds Valid from to only on Reg. Shooting Grd.	\$3.15	<input type="checkbox"/>
Resident Disabled War Veteran Claim No.	Free	
Resident Serviceman on Leave - Service No.	Free	
	Postage	
	Total	

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NAME \_\_\_\_\_ (First) \_\_\_\_\_ (Middle) \_\_\_\_\_ (Last) \_\_\_\_\_ (Occupation) \_\_\_\_\_

Legal Residence St. or R.F.D. \_\_\_\_\_ County \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

AGE \_\_\_\_\_ COLOR \_\_\_\_\_ HAIR \_\_\_\_\_ COLOR \_\_\_\_\_ EYES \_\_\_\_\_ WEIGHT \_\_\_\_\_ LBS. \_\_\_\_\_ HEIGHT \_\_\_\_\_' \_\_\_\_\_"

DATE OF BIRTH \_\_\_\_\_ (Day) \_\_\_\_\_ (Month) \_\_\_\_\_ (Year)

PLACE OF BIRTH \_\_\_\_\_ (Post Office) \_\_\_\_\_ (State) \_\_\_\_\_ (Nation)

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I certify that above information is true and that my hunting privileges have not been revoked for this license year. Under 16 years of age (Resident or Non-Resident) have presented Hunter Safety Certificate \_\_\_\_\_ or prior hunting license \_\_\_\_\_

Resident of Pennsylvania since _____	(Signature of Applicant) _____	Date _____
I hereby certify that applicant has properly identified himself/herself and in my opinion is entitled to license(s) listed above.		
(License No.) _____	(Archery License No.) _____	(Signature of issuing Agent) _____

AGENTS NOT RESPONSIBLE FOR LICENSES LOST BY MAILING.  
MAIL APPLICATION AND CORRECT AMOUNT OF FEE (INCLUDE REQUIRED POSTAGE) TO THE PENNSYLVANIA GAME COMMISSION, LICENSE SECTION, HARRISBURG, PA. 17127, ANY PENNSYLVANIA COUNTY TREASURER, OR APPROVED AGENT. (DO NOT SEND STAMPS) HUNTERS UNDER 16 YEARS OF AGE MUST PRESENT PROOF OF HUNTER SAFETY TRAINING OR PRIOR HUNTING LICENSE. (PREFERABLY A PHOTOSTATIC COPY)

LICENSE FEES NOT REFUNDABLE.



# Goose Blind Applications to Be Accepted September 1

**A**PPPLICATIONS for hunting from goose blinds at the Pymatuning Waterfowl Area in Crawford County will be accepted from September 1 through September 30. Ray M. Sickles, waterfowl management agent, said 40 blinds, each accommodating four persons, will be used during the 1972 season.

There will be four shooting days each week of the season. Blinds will be available on Mondays, Wednesdays, Fridays and Saturdays.

A drawing will be held on October 3 to select 40 blind holders for each shooting day. Each blind holder is permitted to take three guests, so 160 hunters can utilize the area each day of the season.

The following rules and regulations will apply:

Reservation requests must be made on official application forms and must be submitted to the Pennsylvania Game Commission, Pymatuning Waterfowl Area, RD 1, Hartstown, Pa. 16131.

Only one application may be submitted per person.

The applicant's 1972 hunting license number, including the letter, must be listed on the application.

Applications must be postmarked September 1 through September 30; any postmarked earlier or later will be rejected.

Only successful applicants, as determined in the drawing, will be notified.

Registrations are not transferable. The successful applicant whose name appears on the reservation must present the reservation in person at the Pymatuning Waterfowl Area headquarters (registration building) located on Legislative Route 20006 between Hartstown and Linesville about four miles north of Hartstown.

A reservation will entitle the applicant to bring not more than three guests with him. Guests will be pres-

ent and register.

Hunters should arrive at least one hour before shooting time to allow for the issuance of permits.

A federal migratory bird hunting stamp (duck stamp) is required to hunt geese. 1972 hunting licenses and duck stamps must be presented at the check station.

All reservations for any one day will be valid only up to one-half hour before shooting time on the specified day.

Shooting hours for the Pymatuning goose blinds are from one-half hour before sunrise until noon prevailing time, except on the opening day of the waterfowl season, when the opening hour will be 8 a.m., and on October 28, when no hunting is permitted for any wild birds or wild animals in Pennsylvania before 9 a.m.

Sportsmen shall be limited to one visit per hunter per season on the goose area.

Season dates and bag limits will be established later.

Applications for hunting from the Pymatuning goose blinds are available from the Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17120; or any of the six field division offices of the Game Commission; or from any game protector; or the Pennsylvania Game Commission, Pymatuning Waterfowl Area, RD 1, Hartstown, Pa. 16131.

There are also three controlled duck shooting areas at Pymatuning. Fifty hunters can be accommodated on each of these areas daily. Shooting days and hours for the duck areas are the same as for the goose area. Geese may not be taken in the controlled duck shooting areas.

There are no advance reservations in the duck areas. Shooters are eligible on a first-come-first-served basis each shooting day. Those using the duck areas must check in at the registration building.



Tall and graceful, reaching a height of 75 feet or more, black walnut trees are well known for their ornamental beauty. Many have been planted in yards and near buildings for their beauty. In summer, their large leaves create desirable shade areas beneath their green canopies.

Black walnut is a highly ranked wood for gunstocks. It shrinks or warps little, it's light in proportion to strength, and it finishes into a satiny luster. Very expensive stocks with fancy grain patterns and elaborate checkering or carving grace the guns of well-to-do hunters. In contrast, the average hunter goes afield with his plain but faithful rifle, stocked with inexpensive straight-grained walnut, and still brings home game. It's a matter of taste . . . and money.

The hunter who wants to restock his present gun or build a new custom firearm, has a wide variety of styles, grain patterns and prices from which to choose. If he is a real do-it-

## Eastern Black Walnut

*Juglans nigra* Linnaeus

By Ken Calnon

**A**LTHOUGH black walnut is not cut in the large quantities which our more popular hardwoods oak and maple are, it still remains one of our most valuable and best known native trees. Black walnut's outstanding merits are its beautifully grained dark wood, an important nut crop, and ornamental beauty.

Black walnut makes the finest cabinet wood in North America. The colonists recognized its value as early as 1610; they made every sort of their home furnishings from it. Many of these items have been family heirlooms for generations. Due to black walnut's abundance in pioneer days it was often used for such humble things as rail fences. It was also used as railroad ties and fuel.

yourself type, he can purchase a walnut blank to his liking and shape a new stock from scratch.

Undoubtedly, most folks are familiar with the savory nuts of the black walnut, and of all the native nut trees, none but the pecan are more popular. Black walnut's delicious nut meats are relished in cakes, cookies, nut breads, candies and salads.

*Leaves*—One to two feet in length and composed of 15 to 23 semi-sessile (semi-stemless) leaflets, which are ovate-lance-shaped. Each leaflet (approximately 3 inches long)—is smooth and yellowish-green above, paler and downy beneath with finely serrated margins. It is one of the first trees to lose its leaves in autumn.

*Flowers*—Black walnut trees have



both staminate (male) and pistillate (female) flowers on the same tree (monoecious). Staminate flowers are single tassel-like catkins; pistillate flowers are erect, terminal spikes.

**Fruit**—The fruits hang from the tips of the twigs in singles or doubles. In early growth stages, the walnut's outside husk is green; when the nut is ripe, it changes to a dark brown color. With the fleshy green covering attached, the nut is 2½ to 3 inches in diameter. The hulled walnut is 1½ to 2 inches in diameter. Kernels are secured within a very hard finely-ridged shell. Black walnut meats have a slightly oily, distinct taste.

**Bark**—The bark is thick, dark brown and divided into rounded ridges with deep, roughly diamond shaped furrows.

**Habitat**—Black walnut trees are most common in bottom lands or hill-sides that have fertile soil. They are usually found growing individually or in isolated clumps of several trees.

**Wood**—Medium-strong and hard, medium-heavy (39 pounds to the cubic foot, dry weight), with the dark, brown heartwood contrasted sharply

with the pale color of the sapwood.

Squirrels and chipmunks unknowingly propagate the walnut tree by burying large numbers of walnuts in the ground. Many of these nuts are not recovered by these mammals and a new tree begins to grow.

In black walnut's days of glory it attained heights of 150 feet, diameters of 6 feet and a trunk clear of branches 50 feet above the ground. But those trees are gone from the scene, and today a walnut tree 100 feet tall and 2½ feet in diameter is unusual.

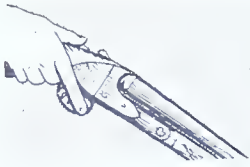
### Old Hunting Licenses Needed

The Division of Information & Education maintains a file of GAME NEWS and other Commission-related material. We currently are trying to complete a collection of Pennsylvania hunting licenses and one each of the following years is needed: 1913 through 1920, 1925 and 1926. If you have one of these licenses and would care to donate it, please mail to GAME NEWS, Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17120.

IRVIN C. DORWARD, of Allentown, exhibits rack of animal similar to elk which he bagged during his third tour in Vietnam. This trophy animal weighed over 600 lbs. and was shot with a 308-cal. rifle at a range of 150 yards. All of the meat was utilized by a Vietnamese Ranger Battalion.

THE NEW METAL flagpole being installed at the Ross Leffler School of Conservation, above, is a gift of Mr. and Mrs. Peter Burrell, Rolling Rock Farms, Rector, Pa. Formerly located at the Memorial at Rector Greens, the pole had to be removed due to a new highway location.





# HUNTER SAFETY EDUCATION



By John C. Behel  
PGC Hunter Safety Coordinator



## Sixth-Graders Complete HS Training

**S**IXTH-GRADERS at the L. Ray Appleman elementary school of the Benton school system receive an unusual education. Every student participates in the Hunter Safety program, and the successful completion of it qualifies both girls and boys to purchase a Pennsylvania hunting license.

James Maier, a teacher at Benton High School, planned the program "not only to prepare the kids to hunt, but also to show all of them that possession of guns or bows and arrows can be safe. Our main theme was not hunting. The idea was to teach the kids how to safely handle the sporting arms they might sometime find themselves confronted with, whether they ever hunt or not."

Ben R. Pollock, superintendent of the Benton schools, gave approval for the firearm safety program because, "We live in an area where hunting is a family tradition and sporting arms a part of most of these youngsters' family lives. I am convinced that this program will make every father's gun a much more respected instrument and less likely to bring grief due to mishandling and horseplay."

Jim Maier was assisted with various segments of the program by Eugene Koehler, driver training and physical education teacher; Dean Kile, vocational-agriculture instructor; Duane Hartman, administrative assistant, and Harold Harter, District Game Protector in part of Columbia County.

The course begins with a series of



slides on nomenclature of sporting arms, archery, and safety with firearms. Following the showing of the pictures and a discussion on them, the students participate in a field demonstration as to safe carrying, loading and unloading. This includes target shooting with shotguns, rifles and archery equipment.

A demonstration is conducted with sporting arms used in hunting. One example was the shotgun, which was fired into large cardboard targets at varying distances. The idea is to implant in the minds of the students the danger of the spreading pellets to hunting companions, dogs, farm animals or any living thing near the line of fire.

Various types of clothing worn by hunters are also used to demonstrate how important apparel is to the hunter's personal safety.

Following the outdoor demonstrations, Mr. Harter reminds the students of game laws, licensing procedures, and bag limits. He then spends considerable time discussing students' questions on hunting and safety.

All students then complete the



Martin Appleman Photo

**TED PAVALONIS** and Tom Fought ponder question from Rickey McMahon about firearms used in course. Training has proved valuable to such youths.

standard test required by the Game Commission before they may procure a hunting license in Pennsylvania.

All concerned are very pleased with the program and with the excellent interest shown by the students.

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## Book Review . . .

# Handloader's Digest, Sixth Edition

Just as handloading is a natural follow-up activity for gunners, the *Handloader's Digest* is a natural accompaniment to the *Gun Digest*. Both are put together by John Amber, long acknowledged the top editor in the gun field, and both reflect his wide-ranging interests. Over 30 feature articles make up the bulk of this book, with a catalog section that gives data on all current handloading equipment, components and related material. Advanced reloaders will find Dick Ceremsak's report on internal case cracks—"A Rare Case"—highly interesting, while fans of the British big bores will appreciate Ken Waters' "Solving Problems in English." In other areas, Major R. O. Ackerman covers quick-loading techniques for muzzle-loaders, Norman Johnson tells the benchresters how bullet alignment can be measured in the case and how it affects accuracy, Peyton Autry describes a method for determining velocity from trajectory, Peter Spiliotos tells how his wildcat 375-284 Magnum cartridge makes a moose walloper out of a 6½-lb. M99 Savage. There's a lot more, but you get the idea. This is a book for shooters. (*Handloader's Digest*, 6th ed., edited by John T. Amber, Digest Books, Inc., 540 Frontage Rd., Northfield, Ill. 60093. 320 pp., 8½x11, paperbound, 1972. \$5.95.)



## *Let's Go Bike Camping*

By Les Rountree

**WE'VE MENTIONED** many times that outdoor participant sports are on the upswing in this country. Bicycling is included in this general group and, if the 1972 season is any indication, this brand of transportation may soon become the nation's favorite. It is not accurate to call bicycling a form of transportation in the truest sense. It is still considered a sport by most individuals who own a two-wheeler. The bicycle is used by a limited number of commuters in heavily populated areas, but the primary use of the machine is to maintain physical fitness and have some fun while doing it.

We may reach a point in history when bicycles are the only method of transportation that will be permitted in certain parts of the United States because of population saturation. They don't pollute, they are very cheap to operate, and they can be easily parked. In many European

cities bicycles outnumber automobiles, and in China and the southeast Asian countries bicycles are the number one form of travel. In those countries of low per capita income the bicycle is an economic necessity. We haven't reached that point in America but the health benefits and the extra fun derived from pedaling around the countryside are well worth consideration.

The bicycling camper is not a common creature on our side of the pond. The idea has not yet reached sizable proportions, but I'm reasonably sure it will, as better equipment is now available. A good lightweight touring bike used to be difficult to find in this country. The standard American bike for decades was a balloon tired affair that had one sprocket—which meant you had to push the rig up each and every slope that was steeper than a minor anthill. As a kid, I had one of these big-tired bicycles and I thought it was just fine for racing around our



small town. It had a horn, a basket and large floppy fenders. I think it was called the Western Flyer. How times have changed! Modern cyclists would recoil in horror at the thought of pedaling one of those monstrosities.

A group of cyclists met in Carlisle this summer and because I wanted to learn more about the modern (or resurrected) art of bicycling, I chased the two-wheelers around for a couple days asking questions and trying out a few bicycles myself. Old hands at bicycling may now turn to another article, because what I'm about to say applies only to beginners. I started from a position of ignorance and haven't progressed too far . . . but I'm learning!

To start off with, if you're serious about bicycling or bicycle camping, I'd suggest you consider only a 10-speed bike. The extra gear ratios allow you to pedal up almost any hill (once you get a little bit of "tone" back in your leg and back muscles), and owning one prevents you from being embarrassed when passing other bicyclists. Occasionally a very good bike can be purchased from a department store at a discount price of well under \$100, but the best place to begin and end your shopping is at a 100 per cent bicycle store.

These people know what they are talking about and will fit a bike to your build and capabilities. They can repair it—the bike—if necessary and will usually take it back on a trade if you decide to move up the ladder. Another great advantage in buying at a specialized shop is that the bikes are fully assembled for you free of charge. This is not always the case at a department store. You may not even be able to buy a bike that is put together.



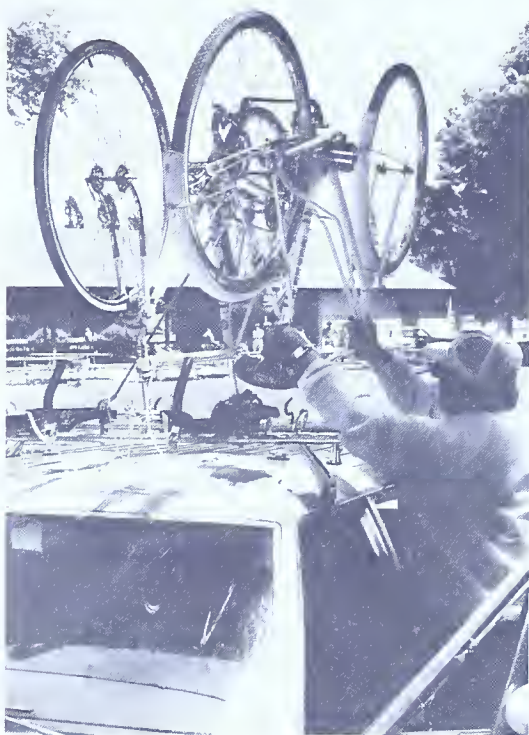
**LIGHTWEIGHT** bicycle panniers and touring bag will carry all the supplies needed for a week's trip. Available from Gerry Industries, Denver, Colo.

The floor sample looks great but after you pay the clerk you are presented with a strange looking box and told you must assemble it yourself. In addition to this inconvenience, these same large stores seldom offer bicycle repairs. If you ride your bike a lot you will need some minor servicing from time to time.

A fine American 10-speed bike, like the Schwinn, can be purchased for slightly under \$100. You can, of course, buy them from the same company for even less—or a great deal more—depending on frame construction and optional features.

Another way to start out is the used bike. Again, the professional shop is the place to go. They usually accept only trade-ins that they have sold and serviced, so they know what they are getting and selling. A good used bike can be bought for \$35 to \$50 and will give many miles of trouble free service. Reputable shops go over their used bikes carefully and replace all worn parts and usually put on new tires. New tires usually run about \$3.50 and should last, with reasonable care, about 2500 miles.

I had no idea that it was necessary or even possible to "fit" a bike to the individual. I knew there were differ-



**WHICHEVER RACK** you choose to transport your bike, it should be one that makes the cycle quickly available without a lot of trouble.

ent size tires but I thought that was about as far as it went. However, frame sizes run from 20" to 26" in height and the saddle height can be widely adjusted. The saddle should be rigged so that the leg is almost fully extended when its pedal is in the extreme down position. This gives maximum power to the pedal stroke and is much less tiring on a long trip. Handle bars also are adjusted so that the grips are at a comfortable level. Hand brakes instead of the old foot-operated brake are standard on all modern bikes.

After you've acquired your bike and become reasonably proficient in its operation, the ultimate goal, at least for the purpose of this column, is to go camping with it. There are two ways that carrying gear can be accomplished. You can lash the gear to a rear carrier or to the handle bars, or you buy the special bicycle saddle bags that drape over the rear carrier. For a really ambitious trip of a week or more, you can supplement your

carrying capacity by wearing a lightweight backpack. Bicycle camping is much more practical today than it was a few years back due to the variety of featherweight gear now available. Light nylon tents, down sleeping bags and freeze-dried foods make possible loads that do not exceed 25 pounds per person.

As with all types of camping, it's a good idea to have a short dry run around the neighborhood before you start out on a long trek. You'll quickly discover what your maximum load should be and you can make adjustments accordingly. Some heavyweight clothing can be eliminated because you will be actively pumping much of the time and body heat will be maintained. A lightweight sweater or down vest should be included, however, for warmth when you stop for a rest or to set up camp, particularly in the northern counties of the state. You can quickly become chilled without some sort of a warm garment. Many touring cyclists carry a pair of sweat pants for this reason.

### Avoid Highways

The touring camper-cyclist should avoid the four-lane highways and heavily congested areas for obvious reasons. Automobiles and bicycles are not a very good mix, and besides it's more fun to tour the back roads on a bike. You get an appreciation of the countryside that you can't possibly obtain when riding in a fast moving car. Check your camping route carefully before you start out. Have some idea where you expect to camp each night and make sure you allow yourself plenty of time to get there.

A backpacker can make about ten miles a day without undue strain in most parts of Pennsylvania, and a bicyclist can make three or four times that much if he wants to. You may not want to for your first adventure. Twenty miles might be a far more realistic goal. In your dry runs around the neighborhood, check how many miles you can comfortably make in



an hour. Then decide about how many hours you want to travel each day. Eight hours of traveling a day is plenty for a novice bike camper. After multiplying your miles per hour times hours per day, it would probably make sense to divide the total in half. That way you will have plenty of time for sightseeing, possibly mending a tire, and just fooling around.

### Camping Possibilities

The bike camper can utilize state and private campgrounds just like any other camper, and often he can also take advantage of private property if he consults with the landowner first. Farmers are sometimes reluctant to allow a trailer or pickup camper back on the "south 40," but a camping cyclist seldom has trouble getting permission to stop for a one-night stay. If given camping permission, follow the clean camper rules and you'll probably be welcome the next time.

There is one overwhelming obstacle that bike riders in general and bike campers in particular have to contend with. Dogs! For some strange reason dogs do not like bicycles. The stories that long-time bicyclists tell about their experiences with dogs are funny only until they show you their scars. Most of them have been bitten at some time and it's a matter deserving serious discussion. When Old Shep decides that he's going to take a chunk out of each passing bike rider, heaven and earth won't deter him. Some riders have resorted to waterpistols, whips, clubs and Mace with varying effects. The device that seems to work best, according to seasoned bikers, is a small compressed air cylinder with a horn device mounted on top. This product is available from Thorpe Industries, Inc., Mountainside, N.J. 07092 and sells for \$2.98. It weighs just three ounces and when Shep decides to attack, the blast from this horn will put him right into orbit. I had a

demonstration at about five feet and believe me the sound will put any dog into reverse . . . right now! It's the loudest *HONNNNNNK* I've ever heard and can be compared with the bellow of 400 insane water buffaloes. People like to bicycle because of the peace and quiet, so this device should be used only for emergencies.

As you progress in cycling skill there will be all sorts of refinements and goodies that you'll want to add. Again, the bike shop is the place to go. Some of these accessories include special gloves with leather palms and knit backs, toe clips (commonly called "rat traps") that keep your feet on the pedals for long distance traveling, bike shoes with ventilation holes, and special reflectors and lights for night traveling. One item that sadly has become almost a necessity in today's world is a high quality lock and casehardened chain. Don't leave your bike unlocked or unattended even for those few minutes it takes to run into a crossroads store to replenish your camping supplies.

An increasing number of campers

**BOYS RETURNING FROM overnight camp-out demonstrate two different ways to carry gear—on back and on bike. It's usually best to let the bike do the work.**





**FOR PERSONS WITH** poor balance, a three-wheel bike makes a good choice, for it won't upset. Large basket is handy for shopping, too.

are carrying bicycles with them on their cars or recreation vehicles. The many commercial carriers available today make it easy. Bikes can be attached to a car or RV's bumper or to a roof rack. Whichever product you decide on, be sure it is one that enables you to easily remove and replace the bikes. If you have to spend more than five minutes on the operation, it will seem more of a chore than a pleasure. Bikes are a quiet, pleasant way to get acquainted with a new campground and the surrounding countryside. And, of course, there is always that last minute trip (for milk or bread) to the closest country store while Mom is cooking in the camper.

The absolute last thing I want to do in this column is present myself as a cycling expert. I'm just as green at this sport as I would be at harpooning whales. But the more I learn about it the more certain I am that camping and bicycling are most compatible. You can carry as much or more than you can as a walking camper, you can get there a bit faster than by hiking, if time is important, and cycling is great exercise. In addition, you will be traveling roads and byways that you would never consider if you were in an automobile. Furthermore, bikes don't pollute and the cost of operation is nominal. A good bike, properly serviced and cared for, will last at least half a lifetime, and with the increased interest in the sport there will always be a willing buyer for your secondhand bike.

### For More Info

If you want to learn more about cycling, your local library should have some books on the subject. A good one is *The Complete Book of Bicycling*, by Eugene A. Sloane, Trident Press, 630 Fifth Ave., New York, N.Y. 10020. The Departments of the Interior and Transportation have just published a booklet "Bicycling for Recreation and Commuting." It is available for 45 cents from the Superintendent of Documents, U.S. Printing Office, Washington, D.C. 20402.

My bicycling trips have been very short ones to date but in writing this column, I've succeeded in convincing myself that a lengthy trip is in order. If I don't get eaten up by Old Shep, I'll provide you with a brief report in a later issue.

### Sample GAME NEWS Copies

*Do you have a friend who is interested in Pennsylvania's outdoors but is not a GAME NEWS subscriber? Perhaps he'd like to see a copy. Send us his name and address and we'll be glad to mail him a free copy of a recent issue of the magazine. Hopefully, we'll get some new subscribers—and maybe your buddy will stop "borrowing" your copies!*



# Set Up For Sights

By Keith C. Schuyler

*Photos from the Author*

**“THE IDEAL** hunting sight would be one that would automatically adjust the sight as the image of the animal is brought into focus and that could be operated by the thumb or a finger when the bow is at full draw.”

The above statement appears in my book, *Archery — From Golds to Big Game*, in the chapter on archery accessories. The line was written in 1969 before bow sights for hunting had come on strong. Well, it has been done. The Sprandel Range Finder Bow Sight fits this statement. It is one of four sights with which I am more or less familiar that incorporate range finding with a sight.

But before you go tearing out to the nearest archery shop to buy a bow sight, we had best talk this thing over. Hunting sights are no more guarantee of success in hunting than they are on the target line. It still takes the man behind the bow to make things work out properly.

If you plan to use a hunting sight, include in your plans the determination to precalibrate whatever sight you use. And use it in practice until it becomes second nature. Otherwise, this extra item on your bow will do

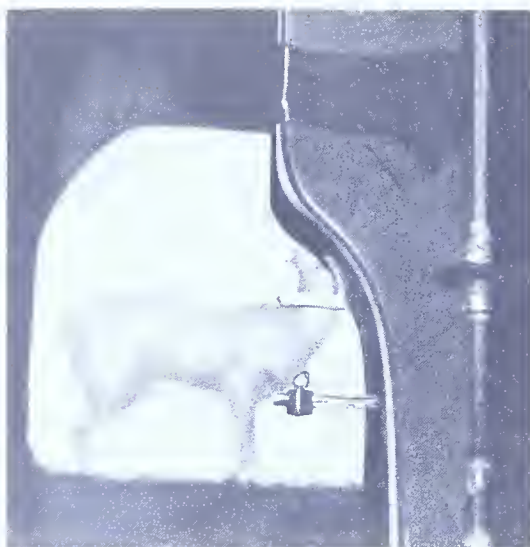


**KWIK-SHOT FLIPSITE** incorporates as many as six sighting pins on a well constructed frame. Knurled knob permits field adjustment to other ranges.

no more than confuse you at the critical moment when you pull up on a deer or other big or small game species.

It takes both time and patience to properly set up a hunting bow with a hunting sight. This is true if you are going to use a single sight pin or one of the more complicated range-finding hunting sights. You are better off to fasten a plain old hat pin in your sight window with a piece of electrical tape, sight it in for 20 yards and practice until you practically never miss, than to have the most sophisticated sight without being completely familiar with it.

Even after all this, I have talked to more than one hunter who could not remember whether or not he actually used his sight when he shot his deer, he was so excited. Those who calmly take their time on the target line with a sight may find it is a completely different ball game in hunting season. When a buck is tiptoeing through the



**SPRANDEL RANGE-FINDER** sight automatically finds proper distance when its parallel bars bracket the target vertically. Adjustable for lateral correction.

rhododendron and the hunter's heart is trying to pound its way out of his chest, things can be rough. Trying to hold a bead or a pin on the vital part of an animal under such conditions can be worse than an instinctive shot which entails only getting a mental image and putting the proper muscles into play.

There are disadvantages to the protuberance that some sights present if you plan to do much moving through the brush. Hunting sights are most effective when the hunter is on a stand and has time to plan his shot. It is possible, when on the move, that a clinging branch can pull the sight out of alignment. Parts can fall off or get broken. If there is complete dependence upon the sight, a shot that might have been easy without the sight can be missed.

These drawbacks are listed not to discourage but to emphasize that the mechanical assistance provided by a sight won't guarantee success. On the other hand, if you have practiced properly and everything goes right, you can increase your odds immeasurably by use of a hunting sight.

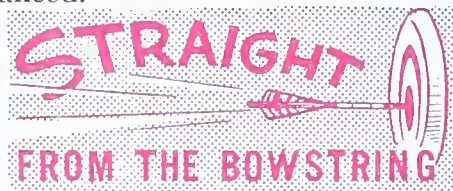
The biggest problem was, is and ever will be, the ability to judge distances under hunting conditions. Yet, at the preferred 20-yard-and-under

shot, even the presence of a single pin can be of help. The tendency of which so many bow hunters are guilty is simply to pull up and shoot at whatever animal is being sought. The reference provided by any kind of a sight immediately inclines the hunter to place that sight on the vital area of the animal. Even if the distance is off a few yards, plus or minus, a killing shot is quite likely.

Since it is a fact that many target archers who do exceedingly well with sights often fail miserably when they attempt instinctive shooting in the field, a hunting sight might provide a logical answer for them. Or the sight normally used in target shooting can be affixed to most hunting bows. It is certain that someone accustomed to shooting a target sight will have much less trouble adapting to a hunting sight than one who has never used either.

### Avoid Temptation

There will be the temptation to attempt shots well beyond what might be considered reasonable for the individual. Of course, a properly set sight will permit longer shots with accuracy comparable at much shorter distances using the instinctive method. It is also likely that use of range-finding sights will be more practical at the longer distances since there is little time or need to bracket a deer when it is at close range. It is still the hope here that, regardless of what sighting method is used, bow hunters will restrict themselves to shots which provide them with a fair certainty of success. Indiscriminate releasing of arrows in the general direction of a living creature is the greatest sin in bow hunting. The risk of merely wounding an animal should never be deliberately chanced.





Bill Wise, who helped with most of the photographs here, is a confirmed sight shooter, whether on the target line or in the field. As a case in point, he downed a nice 6-point buck last year using a bow hunting sight. His hit was almost exactly at the point he picked on the deer. A number of us made several hunts together, and it is possibly significant that, of two deer killed, both were dropped by the use of hunting sights. What follows is an insight into most of the hunting sights available on the market today. You are on your own, but this is how they look from here.

### Range-Finding Principle

Of the sights which incorporate the range-finding principle, one of the more interesting is the Vee-site. At first glance, this sight looks quite easy to both set up and use. Only the last part of that statement is true. Initially, after the sight bar is mounted, it is necessary to remove the V wires which are painted white, and install two L-shaped wires. Also, a plain piece of cardboard is temporarily installed on the sight bar behind such wires. This is for the purpose of setting up proper distance marks so that they will conform to the width of the V when held according to the target under aim. As each sighting distance is determined, by use of the L wires, marks are placed on the blank piece of cardboard with pencil until all distances have been computed from 5 to 60 yards at 5-yard intervals.

After the sighting-in process, the L-shaped wires are removed and V wires are again installed. By moving the sight V to conform to the V diagram, now drawn on the cardboard, the desired result should be obtained. The marks on the cardboard are transferred to the yardage card on the sight bar. Consequently, at least in theory, if the size of the target can be predetermined, it is then possible to determine the right hold with the bow simply by bracketing the target in the V-shaped wires. Actually, this is im-

material, since if the target area is bracketed, the distance should automatically be set by the sight. Price on the Vee-site is from \$5.45 to \$5.65 with a choice of three sighting bars from six to eight inches.

Another sight incorporating the range-finding principle is the Range-



**LINKAGE AND FINGERTIP** control on the Sprandel bow sight shown here. Many archers still shoot instinctively because they are unfamiliar with the advances made in hunting sights.

O-matic. This registered trademark covers a fairly common sight bar that is fitted with four fluorescent rings on metal pins which fasten to the bar. The idea behind this one is to practice at known distances until it has been determined at what distance the ring will cover the vital area of the deer's chest. Properly set up, this sight will give you four exact distances. Of course, if no ring exactly fits the vital area of the animal being hunted, a mental adjustment can be made to aim slightly higher or lower. Considerable practice is indicated beforehand so that the bow hunter will remember which way to make his adjustment.

Instructions suggest that the four sight rings be set up to 45 yards. This is a well constructed instrument, and all parts with the exception of the

sight rings are of a dull, non-glare finish. The sight rings themselves are made of spring steel so that they will take shock loads and resist breakage. This one sells for \$8.95.

Probably the most unusual of all hunting sights which help to determine the range as well as to pinpoint the target is the aforementioned Sprandel bow sight. This is not an easy sight to set up, but once it is locked in at the various distances, it has many advantages. This is one of the newer types on the market.

### Two Horizontal Bars

To provide the range-finding feature, two horizontal bars are actuated by separate rods on which they slide up or down when pressure is provided with a finger through a leverage system. The lower bar has a sight pin which can be moved right or left so that the arrows can be tuned to the bow. For this, or any, sight to work properly, the arrow weight as well as the draw length must be stable. This sight must be adjusted to compensate for arrow drop at various distances. The trick is to experiment sufficiently until you have determined your arrow

**FRYDENLUND HUNTING** sight permits fingertip adjustment to pre-calibrated distances although the hunter must still estimate ranges.



drop from, for example, 20 yards to 25 to 30 yards. All other distances, assuming that you get several of them perfect, should fall in line.

To obtain this adjustment for deer hunting, it is suggested that you start at 25 yards until the sight bars vertically bracket an 18-inch object—the approximate depth of a deer's chest. The sight pin should then be raised to dead center of the target to shoot. When another distance is chosen, the sighting pin should again provide that the target is being hit with consistency. This is the crucial setting, for the top-sliding-range-determining rod must be adjusted so that the combination of the two bars brackets the target. If several distances can be so determined, and this will take experimentation, the sight should then work well at any distance up to where the bracketing bars are forced together and can no longer bracket the target. This is normally about 45 yards, a range to cover most sensible shooting.

### Usable for Small Game

It is recommended here that the archer's side of the black bracketing bars be painted white for better visibility. The sight can also be set for small game by using a smaller target. Actually regular 6-, 12-, and 18-inch target faces can be used in setting up this or any sight. It must be remembered, however, that the same sighting cannot be used indiscriminately for large or small game. Price for the Sprandel, \$19.95.

The Rain-bow hunting sight incorporates a regular sight bar with a system of six sighting pins for both range finding and accuracy. On this sight, the pins extend through the sight bar on each side. Opposite the sight window is a card which has colored dots to match the color on the sights pin. By using the gap system at full draw to determine which two pins bracket the approximate depth of a deer's chest, the proper choice of sight can be chosen by predetermined color.





**A THUMB OR** finger can be used to set the Frydenlund sight when the bow is at full draw.

This one lists for \$9.95.

These four sights each take a somewhat different approach to the problem of range finding coupled with the need to pinpoint the target once the distance has been determined.

A sight which incorporates a finger-activated leverage system to obtain the desired distances is the Frydenlund hunting sight. This is not a range finder, but it does permit easy adjustment to precalibrated distances when the bow is at full draw. In fact, it operates much like a regular target sight except that the yardage can be set with the bow hand while the archer is aiming. It is still necessary to estimate the range.

Among the other hunting sights on the market which incorporate the standard sight bar with sighting pins are the Shur-hit Score More hunting sight with three adjustable pins. The T-Score More bow sight has a single locking pin, suggested for those trying a bow sight for the first time. An H-S Score More sight has three separate aiming beads to permit three separate distance settings.

The D-J hunting sight has a solid mount bar with four adjustable pins. The Cavalier hunting sight has four



**BEAR TAKEDOWN** bow has three fluorescent peep sights which can be calibrated for selected distances.

adjustable pins and an advantage of multi-colored aiming beads intended to keep the bow hunter from becoming confused in selecting the proper sighting pin. The Nottingham bow sight is a three pin arrangement with a hood over the pins similar to that found on the front sight of a rifle.

Bear's Premier hunting sight has three peep-type fluorescent adjustable rings. This was especially designed to fit Bear bows which have been mortised at the factory for the purpose. The Saunders Huntmate sight is a four-pin arrangement with an adhesive fastener at each end to avoid the necessity of drilling holes to attach the sight to the bow.

### One of the First

The Scanner, one of the first hunting sights, which was illustrated in my November, 1970, column, is a see-through plastic arrangement with the yardages marked from ten to 50 yards at five-yard increments. This has sturdy metal mounts with an acrylic sighting plane. It comes in a standard black imprint or with a replacement now available in bright red. First setting is made at ten yards by using a vertical slide adjustment.

The next setting is made at 50 yards by swinging the sighting plane away from the bow until the 50-yard mark is dead-on. This then brings all other yardages, which are factory calibrated, on target. Whatever deviation comes at the interim distances is probably less than the average hunter is able to compensate for in the field.

### Six Sighting Pins

Of the pin-type sights, the Kwik-Shot Flipsite incorporates some of the finest engineering I have seen in a sight. Holding as many as six interchangeable sighting pins, each can be flipped out of the sight window by means of spring tension which then holds it firmly against the sight bar. Consequently, this sight can be set up for six precalibrated distances. When shooting at close targets such as woodchucks or squirrels, the longer distance pins can be flipped out of the way to avoid confusion. The only fault I find with this one is that the white calibration card faces toward the animals on the back of the bow where it is apt to draw attention when the bow is moved into position. A dialing knob permits moving all pins to pre-set distance marks on the card. Four-pivotal models, with the short extension, sell for \$29.95, and the longer extension costs \$5.05 more. The six-pin model goes for \$39.95 and \$45, depending upon the length of the extension. Additional sighting pins, which can be installed, are \$5 each.

### Practice is Paramount

A hunter can be confused by all multiple-pin sights in the excitement of a shot. The need for practice is paramount. It would seem that these extra pins might be used as a range-finding device by setting them so that they bracket, for example, an 18-inch vertical target at 25 yards. Mental adjustments could then be made depending upon how the actual animal appears in the bracket.

In presenting these hunting sights,

there is no intent to recommend one over another. Each archer must decide which one is most likely to fit him best under the hunting conditions most common to his experience. Or he may just want to move the sight from his target bow to his hunting bow to determine if he likes the idea.

Bow sights made just for hunting are relatively new on the scene, and there will undoubtedly be improvements made in them. They have both advantages and disadvantages under field conditions. Despite any problems they may present, if properly set up and properly used, they can improve accuracy. But no hunting sight can completely overcome the excitement attendant to releasing an arrow at game.

Whether using the picture or gap system, sighting down the arrow with three fingers under or employing the most sophisticated of hunting sights, it will always be necessary to put it all together at the time of the shot to succeed.

### List of Manufacturers

Following is a partial list of addresses for manufacturers of hunting sights mentioned in this column. Information on others can be obtained from local archery dealers or one of the major supply houses.

**Range-O-Matic Sight Co.**, 35-572 Strathcona Dr., Mt. Clemens, Mich. 48043.

**Frydenlund**—Moto Miter Co., P.O. Box 37, Prairie du Chien, Wis. 53821.

**D-J Hunting Site**—Davis Machine Shop, St. James, Minn. 56081.

**Bear's Premier**—Bear Archery, Rt. 1, Grayling, Mich. 49738.

**Saunder's Huntmate**—Saunder's, Columbia, Neb. 68601.

**Quick-Shot Flip Site**—Bucks & Bows, 612 Main St., Pittsburgh, Pa. 15215.

**Sprandel's Bowsight**—Sprandel's Bowsight Co., 19 Brookside Dr., Monroe, Conn. 06468.

**Scanner**—3 Hawthorne Rd., Gibbsboro, N.J. 08026.





**MOST SHOTGUNS MADE TODAY** have stocks too straight for rabbit hunting, Lewis says, though they're just right for most bird shooting.

## Empty Game Bags Equal Wrong Shotgun

By Don Lewis

*Photos by Helen Lewis*

**R**AY AND I ducked behind a large growth of crab apple trees when he whispered, "Here they come." We jumped to standing positions as the four fast flying doves hit gunshot range. We were not more than a dozen feet apart, but the speedy birds zoomed to Ray's right, offering me no shot. The birds were nearly out of range by the time Ray started to swing, and his two shots were painfully slow and complete misses.

"Man, how could I miss such easy chances," he said disgustedly, shoving two fresh rounds into his pump gun. "Do you think they were out of range?"

"That's possible, since you took most of the evening to get your gun up and shoot. I usually load my shotgun before I see my game," I ribbed my friend.

"It's this bloomin' pump gun. It's

just a little too long, and like all pump guns, it won't work smooth. I could have fired my old Oak Leaf single barrel just as fast," Ray lamented.

"Wait a minute, Ray," I shot back. "Either you're just talking to hear yourself or else you know little about pump guns. Other than the semi's, the pump is the fastest thing going, and some experts claim they're just as fast."

"Not mine. Even with a good cleaning every week, it takes a full minute to get a round out of the magazine and in the chamber. I use another ten seconds while pulling the trigger. Sometimes I have to step back so the trigger will have room to go," he answered sarcastically. "Aren't all pumps like that?"

"I'm using a Savage Model 30T trap gun, and you don't hear me complain- ing. I've downed a couple without



**ITHACA'S NEW M51 autoloader proved ideal for late season ringnecks, Lewis found. Hunter can use any type of gun providing it fits properly.**

running into your type of problems. I'd advise spending a little of the money you have stashed away and get a shotgun that works smooth and fits."

"I'd spend the money in a minute if I thought what you say is the answer. I guess I haven't handled enough of them to know. Mine has been in the family for years, and I never thought about buying another one."

"There's still over an hour of hunting time left tonight, and I have a dandy High Standard Flite King trap gun in the four-wheel drive. You're welcome to use it, and the change may do you good. However, I won't be responsible for the amount of ammo you use." I warned.

Before my long-time hunting friend could answer, two singles came by a few seconds apart, and he never touched a feather with the three shots he fired. It was plain to see he was exasperated. My second reminder

about the High Standard and how smooth it operated didn't lower his blood pressure any. I knew his disposition and got set for a verbal blast.

"What the dickens are you talking about? I won't shoot any more ammo from your cannon than I do in my family heirloom," he yelled.

"That's what you think. My Flite King is the smoothest operating pump gun I've ever handled. I'm not sure all High Standard pumps work as well as mine does, but you won't have any problems getting the shells in and out of this one. I think it's part semi."

"Bully for you," Ray retorted. "Next you'll be telling me it retrieves. And on the high, high shots, maybe it'll squawk, 'Too far, too far,' or just won't shoot to keep a fellow from missing. Why aren't you using it if it's so great?"

"I'm satisfied with the Savage for this hunt. This trap model has the extra weight that makes it easier for me to make a steady, smooth swing. Also, this 30T is another shotgun that has the heft and feel I like, along with being just right in stock length and drop. Anyway, you're welcome to the High Standard, but I suppose it wouldn't help much the way you've been shooting this evening."

"I'll use it just to say that I once used the fastest pump gun in the East. And I'll keep only 12 shells with me so I won't accidentally shoot more than the limit," my pal mumbled as he started to leave.

During his absence, six doves passed over but none came close enough for a clean shot. I was so intent on watching the skyline, I failed to see Ray slip into position several minutes later. Just as I noticed him, a pair of





low flying birds cleared a line of saplings to Ray's right. He spied them instantly, and in one quick motion popped up and fired two fast shots. Both birds folded.

"Nice shooting," I yelled. "You sure made those look easy."

"I guess I got lucky. It's not often I make a double unless about thirty are going over in a long line."

"Maybe it was the shotgun," I said, and waited for him to explode, but to my surprise he said nothing. When a single tried to skirt around him a moment later, it was taken on a fast second shot.

### Gun Not Overrated

"By gollies, I never handled a gun that worked so smoothly. I hate to admit it, but you sure didn't overrate this gun. I didn't realize I had a second shell in the chamber until I remembered seeing the empty fly out. I believe I can work this pump nearly as fast as my son's semi-automatic."

"Now look who's talking. If you're suggesting you might dip in the old sock and treat yourself in a new shotgun, I'd have no qualms in suggesting either the Flite King or the Savage 30."

Before my hunting buddy could figure out a way to diplomatically ask for use of the High Standard awhile, I offered it to him for a few days. When I finally got the gun back at the end of the season, my friend's gratitude was so great I'm sure he would have gladly taken my place on the gallows if I were condemned, unless he thought he might get the Flite King in my will. The moral of this little episode is that a change to the right shotgun made a vast difference.

This coming season, literally millions of shotgun shells will be fired in Pennsylvania. But despite all the shells fired, only a few hunters will harvest limits of game. I assume the average hunter will fire a box or more and take six to 10 pieces of game. Even a box of shells per hunter adds up to over 25 million rounds in this

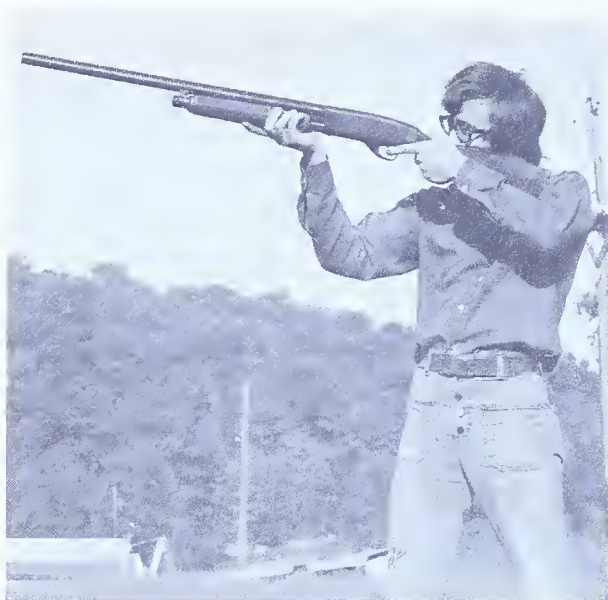


**SINGLE BARREL** scattergun doesn't impress some people, but this hunter found it more than adequate for bunnies ahead of his beagle.

state, and there's no doubt in my mind that three times that many will be used without increasing the game take very much.

When 75 to 100 million rounds are fired and only 10 to 12 percent connect, there has to be a reason beyond poor shooting. Some shooters are poor shots for lack of practice, many can't estimate the effective range of their shotguns, others lack experience, and a whole lot of other things contribute to not connecting.

Too many hunters feel a miss is impossible with the shotgun because it throws a pattern of shot. Somewhere along the line, the theory got started that a shotgun throws a bucketful of shot covering everything in a four-foot



**SOUTHPAW** Dwight Snyder tries out the Model 30T Savage, a smooth working scattergun which Lewis likes for Pennsylvania dove shooting.



**WINCHESTER** Model 101 20 gauge, bored improved cylinder and modified, works well on skeet range as well as for our upland hunting.

circle at 30 yards. A feeling still prevails that the ol' scattergun will do the job if just pointed in the general direction of the target. This is absurd; in fact, it's plain ridiculous!

A shotgun does throw a pattern of shot that increases in diameter as it moves away from the muzzle. What seems to be misunderstood or ignored is the fact that as the pattern increases in diameter, the pellets spread farther apart, creating gaps in the coverage. Shots taken at long distances have little chance to put enough pellets in a piece of game to make a clean kill. The fact that the pattern is not nearly as large as many seem to think is another reason why more game bags aren't filled. However, I believe the prime factor involved is the shooter's lack of knowledge over the time element involved when game is flushed.

It is impossible to say precisely how many seconds any shooter will have on a given shot, as the terrain, type of game, and angle of its departure have to be considered. I think I can state most shots at flushed game permit only three to four seconds at the most for the hunter to determine it's

legal game, raise the shotgun to his shoulder, aim and fire. Allowing one second for the hunter to determine it's legal game and also safe to shoot, this cuts the stooting time to three seconds or less.

Now we are getting into the meat of the situation. From here on out, the individual will have to determine how he wants to use these few remaining precious seconds. If he has to battle an ill-fitting shotgun, he automatically reduces his aiming time. There is no argument the average hunter can shoulder a good fitting shotgun in less than a half second if conditions are ideal and he is not hampered with bulky clothing. But since conditions are seldom ideal and most guys wear too much clothing, plus my argument that most shotguns do not fit, a full second or more will tick away while the average hunter is getting ready to shoot, and the critical point has not been reached.

With no more than two seconds left, the hunter is really going to hurry to align his shotgun on the path of his target, get the proper lead or aim and fire. For the avid shotgunner who



spends a summer shooting trap and skeet, none of this is any problem, but for the man or woman who hasn't fired or even handled a shotgun since the previous season, it's another matter.

I simply can't advocate cutting the time it takes to determine that game is legal and safe to shoot. Ample time must always be given to these two. We must look elsewhere for a way to afford the hunter more time to swing and aim, and it rests entirely in the time spent shouldering the shotgun. It's more than possible that the out-of-practice hunter could spend a full two seconds getting the safety off and the gun up, and it's my strong contention a shotgun that is too long, too short, or too heavy is responsible for much of this time being used. The out-of-practice hunter will reduce his lift time to half by using a shotgun that is compatible with his build and arm length.

### Just a Few Dollars

Cutting the time it takes to shoulder the shotgun is not an automatic guarantee the hunter will begin to score immediately. For sure, he's on the right track, but a good fitting shotgun encompasses more than just length and weight. Drop and stock dimensions play a vital role in good shotgunning. If you are starting to lose interest because you think I mean expensive customizing of the stock, don't quit now; what I'm talking about can be done on the local level for just a few dollars.

No two of us are built exactly alike. Somewhere in our neck length, arm reach, or chest dimensions we vary and to a degree sufficient to prevent one shotgun stock from being right for all of us. There is only one course of action to take—find the right stock or have the necessary changes made to make one right. This may be the simple act of removing or installing a butt pad, changing the pitch of the butt plate to correct a drop problem, or having a new stock installed. Gen-

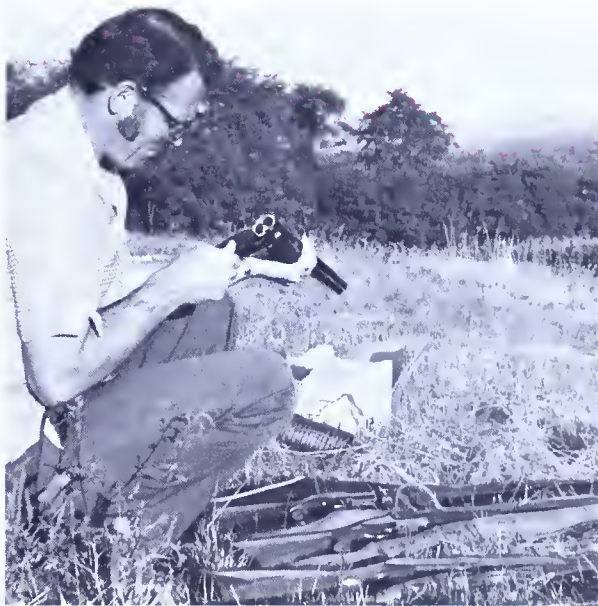
erally speaking, one of the first three changes will be all it takes.

I've found drop is a major concern. I've used many fine shotguns on field hunts that didn't have adequate drop for me, and results were always poor. In fact, for my own use, I'm very fussy about the drop in the stock. However, many hunters want little or no drop in the stock and they do very well, too.

For my type of shooting, I want to see directly down the barrel on a level plane. This is why I need a shotgun with plenty of drop. A straight stock or one with little drop holds the face up, and the hunter will be looking down on the front sight. This will tilt the barrel upward slightly, throwing most of the shot charge above the line of sight. In trap shooting, this is essential—you want to see the bird just above the sight—but rabbit hunters especially would do better with more drop than too little.

My late brother, Dan, was a fine shotgun handler and epitomizes what a man and a shotgun can do if they are well matched. Dan was not a

**TRYING OUT A number of different gun styles on claybirds thrown with hand trap quickly gives a good idea of their handling qualities.**



large man and was plagued with ill health from his birth, but this did not stop him from getting just as much game as most local hunters. Dan had two things going for him; he had fast reflexes and a 16-gauge Crescent shotgun that fit him perfectly. Back in the '30s in my community, a 16-gauge was frowned upon as being too small, as was any shot size smaller than No. 4. Dan used 8s in the right barrel and 5s or 6s in the full choke barrel. He knew pattern is what counts, and the smaller shot gave the dense patterns needed.

While many of his hunting buddies blasted away miss after miss with a variety of 12-gauge long barreled guns with high brass 4s, Dan scored time after time. What he lacked in stature, he made up in gun handling and hunting savvy. Once when hunting with a big city skeet champ who found the fast flying grouse tough targets in the river hill grapevies, Dan made an incredible double on these birds flying in opposite directions. The skeet champ who had promised at breakfast to share his shooting knowledge on grouse with Dan left the woods a

shaken and perhaps chastened man.

I mentioned that my brother had fast reflexes, and he did. I hunted with him many years before his death and saw him in action plenty of times. Yet with all his quickness, numerous shots would have been unfired if his custom Crescent shotgun had not been just right for him. The modifications were few and simple on his famous gun, but they were right for him, and the grouse, rabbits, and quail that fell victim to this matched pair prove my point beyond words.

Few of us will ever make a double on grouse flying in opposite directions or down a rabbit and a grouse with two fast shots, as Dan once did, but we can improve our shooting by finding a shotgun that has the correct dimensions. Even a novice will see the difference if enough types and models are handled before the purchase is made.

If past seasons have been dismal and unfruitful, don't stop now. In fact, don't blame poor shooting entirely. A change to the proper shotgun could be the start of a full game bag.

---

### Big Fellows

Mature American bald eagles sometimes measure 40 inches from the end of their yellow beaks to the tip of their white tail feathers.

## Looking Backward . . .

"An old Swede, called Nils Gustave's Son, who was ninety-one years of age, said, that in his youth, the bears had been very frequent hereabouts, but that they had seldom attacked the cattle: that whenever a bear was killed, its flesh was prepared like pork, and that it had a very good taste. And the flesh of bears is still prepared like ham, on the river Morris. The environs of Philadelphia, and even the whole province of Pennsylvania in general, contain very few bears, they having been extirpated by degrees. . . ."

Peter Kalm, "Travels into North America," I, 91-92, trans. by John Reinhold Forster (2nd ed.), London, 1772.



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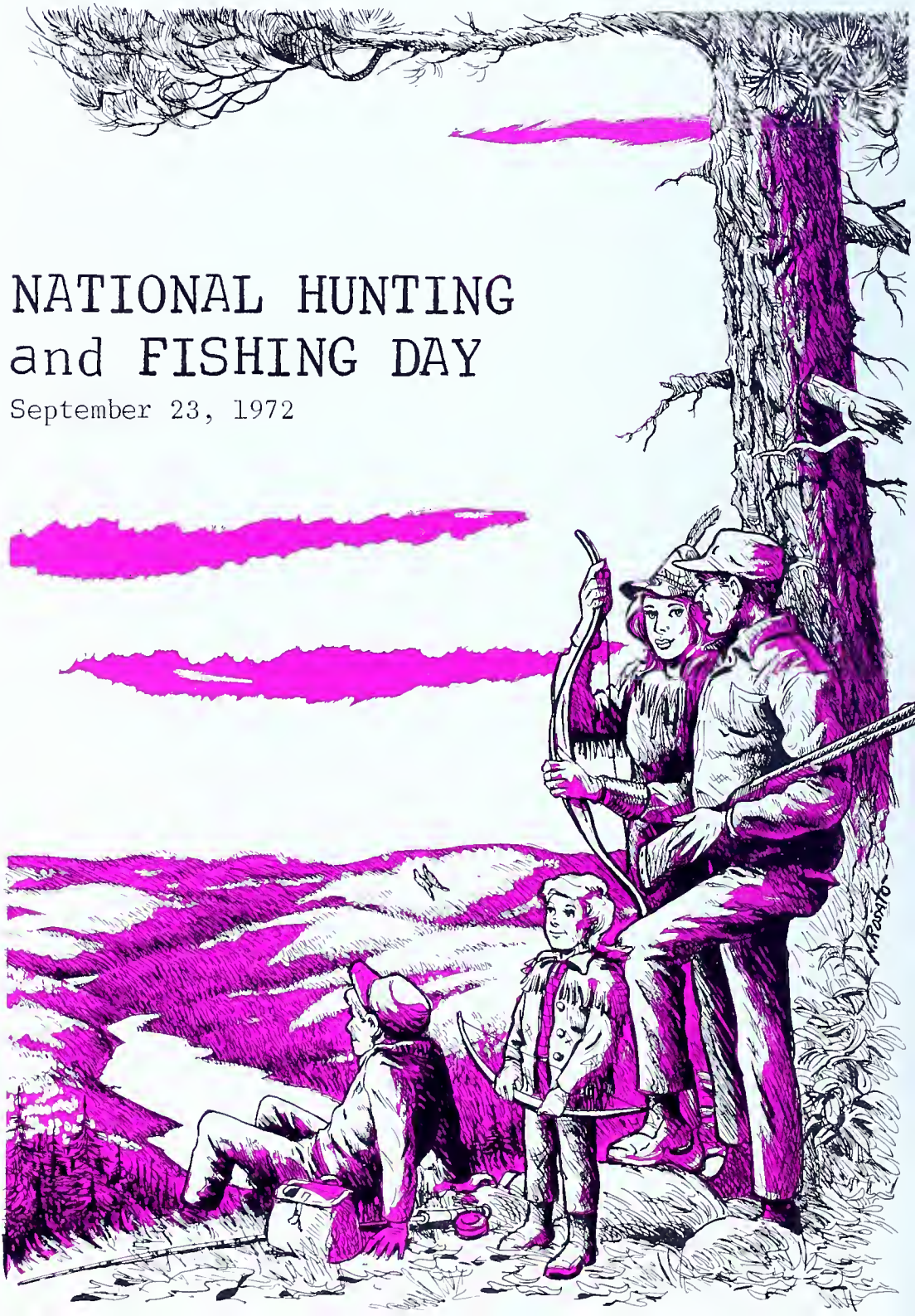
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### COVER PAINTING BY KENT PENDLETON

The wood duck is the most beautiful species of American waterfowl, in the opinion of many. This feeling apparently goes back a long ways, for its scientific name, *Aix sponsa*, is translated as "waterfowl in wedding raiment." Drainage and logging in the early part of this century climinated much of the woodie's favored habitat—deep flooded swamps and tree-grown secluded pools—but wise conservation measures have made it a common species again. Nesting is usually in a hollow tree (or a manmade nest which simulates one), sometimes 50 feet above the water level. Ten to 15 white eggs are laid. Wood ducks feed on insects, duckweed, acorns, etc.

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## Trouble for Shooters

THE PROPOSED HANDGUN CONTROL ACT OF 1972 — S. 2507, the Bayh bill — has passed the U.S. Senate with amendment and will soon be up for consideration in the House of Representatives. If this bill passes, private ownership of handguns in this country will be dealt a tremendous blow. Almost all forms of news media have misrepresented this bill, claiming it will prohibit only the sale of crudely made, unsafe handguns of the type called "Saturday Night Specials." This is not true. The Bayh bill will restrict the sale or delivery of handguns to models approved by the Secretary of the Treasury and *would eliminate the sale or delivery of approximately one-third of all handgun models now made in the U.S. without reference to quality or price or to their suitability for self-protection or the defense of one's home or business.*

Stated briefly, the Secretary shall not approve any handgun model unless representative samples have been tested and found to meet the criteria specified in the bill, criteria which relates to overall size, barrel length, frame construction and weight — *but which has almost no regard to quality, safety or price*, the characteristics which supposedly determine what constitutes a Saturday Night Special. The bill says that no pistol shall be approved if it has an overall length of less than 6 inches and a height of less than 4 inches; no revolver shall be approved if it has a barrel less than 3 inches and an overall frame length of less than 4½ inches. Banned by these restrictions would be such popular, high-grade handguns as High Standard's Plinker and Sentinel; Ruger's Standard auto, Bearcat and Security Six; S&W's Airweight Kit Gun, M&P Airweight 2", M36, M37 Airweight, M60 Stainless, M19 2½"; Colt's 3" Cobra, Huntsman, Detective Special, Agent and Cobra; Harrington & Richardson's 900, 622, 926 and 929 models; Dan Wesson's 2½" M12 and the Charter Arms Undercover model. Not qualifying under the "hammer drop" test would be the famous Colt Single Action Army, New Frontier and Scout models and Ruger's Single Six, Blackhawk and Super Blackhawk. All of these models are outstanding handguns for sport, defense, hunting or plinking. None is a Saturday Night Special. Yet all will be prohibited if the Bayh bill passes!

Furthermore, this bill, which says that no handgun may be sold unless approved by the Secretary of the Treasury, has no statutory requirement that the secretary act. Thus, if he does not give his approval, *he cannot be made to do so and by this lack of action sale of any or all handguns can be eliminated.* There are other features equally repressive to law-abiding citizens. This bill does *not* deal with only Saturday Night Specials, as the anti-gun people have repeatedly claimed. It is an extreme threat to legitimate gun ownership. Write your congressman (Honorable \_\_\_\_\_, House of Representatives, Washington, D.C. 20515; you can get his name from your post office). Tell him how you feel about this bill — immediately! — Bob Bell





Sometimes . . . Maybe Once in a Lifetime . . . a Timberdoodler Gets  
Into More Birds than He Ever Dreamed of . . .

# A Flight!

By Nick Sisley

**H**ALF-DOLLAR-size white splotches were all around me, and the tinkling bell on the heavily ticked setter had stopped only moments before. It was his snow-ball colored tail, sticking straight up like a poker, that I spotted first. Cautiously I moved forward, anticipating the twittering wings of a helicoptering timberdoodle.

The eruption began with a single bird that disappeared in the thick cover of crab apples, gray dogwood, and alders before I could snap the little 20 gauge to my shoulder. "Whoa," I cautioned the dog, figuring there had to be more birds around with all the sign on the ground. Another step, and two birds went out, three steps to the side of my long-haired setter. Hurrying to try for a double, I snapped too quickly at the first, swung to the other automatically, and he went out of sight as I fired the left barrel — at where he *had* been. Man, what a performance.

Now beginning to quiver a little with all the action, I cautioned the dog. He felt my tenseness, began dropping his tail. I cracked the shotgun to reload. Another bird went out, and by the time I'd shoved fresh fodder into the chambers and snapped 'er shut, woodcock number four made good his escape.

After walking ahead of the dog for some distance and kicking at the brush, trying to coax yet another bird from this extra productive point (I was also kicking because of disgust at not having bagged even one of the critters), I released the dog. Nose full of scent, the setter worked extra cautiously, tail wagging, making game, head high, slow, almost afraid to take the next step lest he send a woodcock skyward prematurely and incur my

wrath. He wisely realized that such missing was frustrating for his master.

Thirty yards later he was locked on point again. I walked toward the dog, reminding myself to get my cheek down against the stock and to lead a touch on the swing prior to pressing the trigger home.

The mental exercises paid off, for whether it was a brand new woodcock or the reflush of a previously pointed bird, it toppled hard to the sting of the right barrel. The setter broke to the shot, but stopped short on command. So he wouldn't get the idea that breaking was permitted, I walked ahead and picked up the warm, long-billed quarry myself. A bit more content than after the previous point, I smoothed its feathers, reached around back to the game pouch in my blaze orange vest and pocketed it. I ambled back to the setter, gave him a fond pat on the head, and released him to find more.

## Give It My All

When the Pennsylvania season on woodcock starts, I give it my all. Not only do I dearly love to hunt these challenging birds, I am also fortunate to flush them in good numbers during the early part of the season. My good hunting lasts about a week, then my pet spots become devoid of birds. Whether they leave for warmer climes or try to band up with other woodcock elsewhere, prior to migration, I leave to the biologists to find out. I seldom have luck in my covers after the first five or so days. I'm sure my early hunting is on native, not migratory, birds. But the day I am describing here occurred many days *after* my normal shooting was over.

After the woodcock are gone from the pet covers I visit year in and year



**I PICKED UP THE** long-billed quarry, smoothed its feathers, reached around back to the game pouch in my blaze orange vest and pocketed it.

out, my attention turns to ruffed grouse hunting, and so it was this past October. It was one of those mornings when I got lucky and limited out on grouse early. Not a usual occurrence. Two of these great game birds merely happened to fly right into my shot patterns before nine o'clock in the morning. It was then I went to the woodcock cover hoping to find one or more strays.

As any dedicated woodcock hunter might have guessed, I was into one of those seldom seen but often heard about woodcock phenomena — a *flight!* The average hunter never sees a genuine flight of woodcock, and the ardent timberdoodle enthusiast can

expect to come across this rare phenomenon only a few times in his entire hunting life. Everything has to be just right.

When woodcock migrate they don't always do so in large numbers. Bands of a few braces are common, though flocks of a dozen or more are also noted. But the migration of say 100 or more birds together, touched down in the same place, is indeed a rare spectacle. The weather can be the most important factor. The weather must suddenly turn sour just at the point where several flocks are funneling through, so that the birds all drop into a relatively small patch of cover — not always because they want to, but because nature (the weather) makes them take refuge. Now the birds are all concentrated in one small patch.

### Luck Helps

The next requirement is for the hunter to have the luck to go to that particular spot on that particular day. The entire group will seldom stay even two days. It was after my normal good woodcock shooting had already terminated that I went back to this favorite cover, remember. I wonder if I'll ever have such a memorable day again. In a way I hope not, for the recall of those hours is so well ingrained in my memory. But then again, there was so much action and it was so unusual that any outdoorsman could do nothing but look forward to seeing sporting birds in such bountiful numbers just one more time before he begins his hunting in a far better place.

Now with one bird in the bag, plenty of sign on the ground, and a woodcock-wise canine for help, I was eager for more of the same. For long minutes the dog went on with no success, and it was tough to figure why. I knew birds had to be all around, plus we were still working in the general direction that the four from the first flush had taken.

I kicked up the next bird from its



tight sit myself. I swung the gun around, then held back, for the dog was working ahead and hadn't seen or scented this one. It was the added pleasures of proper dog work I was looking for, and from the looks of things, there would be no trouble filling a limit over points. I watched its flight closely, saw him veer right into a stand of willows at the last second, then his wings flared out, preparing to sit down.

### **Aimed Right**

I called the little setter in, then directed him to the front, calling him back in several times until he was aimed in the right direction. The setter got too close, muffed his chance, flushing the bird, then jumped stiff-legged several steps in pursuit. I didn't have to say "Whoa." He stopped on his own accord, then turned to look at me, panting, eyes saying "Nuts, I fouled up."

I passed up the relatively easy shot because of the dog's glaring mistake, walked over to him and swatted him once with my hat. Easy discipline, but something that always gets the point across with this setter. Besides, he already knew he'd done wrong.

At the flush I'd had the presence of mind to watch where the bird was going, so again had it fairly well marked down. The dog had watched the flight, too, and when I released him he headed directly for the bird. It took some doing, but in time he was on point. A perfect straightaway, but I neglected to slap my cheek with the stock and missed. I felt like swatting myself. Some days I have the perfect knack for shooting too quickly on fast targets in thick cover, know that I shouldn't, but keep making the same mistakes year in and year out.

This one crossed the creek and I couldn't wade it in my rubber bottom, leather top pacs, so the dog and I had to swing west, working along some excellent looking alder cover near the stream bank. I flushed the next three birds on my own, and because of the

notable lack of success in my shooting and the dog's inability or lack of luck to come across them right, was sorely tempted to shoot. But all these birds made a seldom seen opportunity for dog work, and I kept telling myself something like "discretion is the better part of valor."

In a half daze, daydreaming about the abundance of woodcock in this 60-acre spot, I hadn't realized that the tinkling bell had stopped again. All at once, there was my companion, stacked up on game, just ahead in the heavy thicket. There wasn't time to make the mental reminder concerning cheek, lead, and swing. There was merely a blur of long-billed bird, the slap of the little 20, and the knowledge even before I saw him winging off in the distance that it was another clean miss.

I pushed the lever, pulled the spent shell with the dented primer from the right barrel, extracted a fresh load of 8s from my pocket and dropped it into the empty tube. Suddenly I was very hungry. With all the quick action, I hadn't realized it was past noon. At the car I shared a corner of the braunschweiger and cheese sandwich with the setter, then had three cups of iced tea from the thermos. After a hard blowing rain during the night, it was beginning to clear off and warm up. Patches of blue sky began to show. The overcast was giving way to those huge billowy clouds that resemble piles of mashed potatoes to all kids.

### **Dozed Fitfully**

The balmy weather and full stomach soon had me sitting on the grassy bank alongside the car, the setter nuzzling my side with a tired but anxious look in his eye. Guess I wasn't as anxious as he, for I dozed fitfully for an hour before I could get up, lock the car, load the shotgun, and amble down into that bird filled cover again.

I couldn't help thinking of less productive days afield, and the few disheartening ones when not even one

bird jumped up and flew off to warm one's blood a little. I knew there was going to be plenty of action that afternoon, and I meant to savor every minute of it.

The alders are always best for finding woodcock, day in and day out. Crab apple stands also produce well, though it's often tougher to get acceptable shots in these thorns. Willows are a favorite that not all would-be woodcockers know about. Perhaps a more simple description of prime woodcock habitat is wherever the

ground is bare or reasonably bare of grass and there is rich, moist soil for the timberdoodle to probe for fishing worms. Once you get the feel of what to look for cover wise, you'll recognize the potential spots immediately. Until then the novice will just have to come across his woodcock by chance.

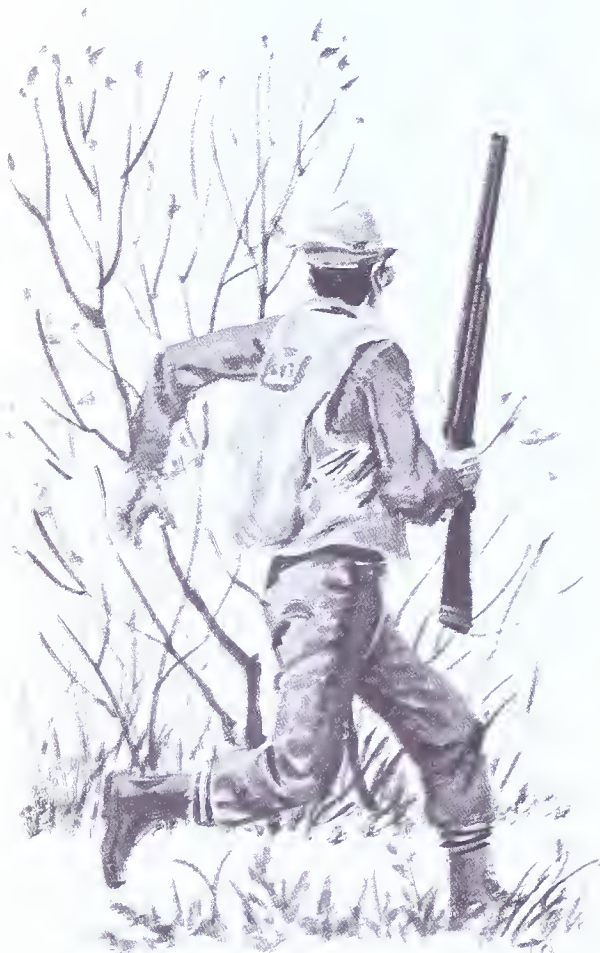
The setter was working off to the right in a patch of interspersed cover — alders, crabs and grey dogwood, with many small openings. He slammed into point only a few minutes from the car. I was watching the dog the whole time — saw him catch the scent first, then work it finally to ultimately pin it, seemingly turning to stone.

### Cheek on Stock

There was time to make the mental calculations, cheek on stock, a bit of a lead to match with a fast swing. I walked in. The bird flashed up on the other side of the brush, exactly opposite both the dog and me, offering no shot. I scooted around the tangle, trying to glimpse a movement in the distance to give me the edge at finding him one more time. I saw nothing, but murmured something about the critter's luck, for with the slightest of shots I would certainly have had him dead to rights. (Understand that my ego thinks I'm the greatest of wing shots!)

Following the general sound of his wing beats, the setter and I were soon in the area where he should be. A point! A flush. One bird, then another, followed by another, yet a fourth. Flustered, both barrels of the double went off so quickly that they almost blended into one. Nary a feather drifted in the breeze. As I tried to get my bearings a fifth bird went up, and a sixth, the setter still mannerly holding, but looking at me dumbfounded, for I'd neglected to reload.

Frustrated but smiling, I levered 'er open, extracted the empties, shoved two full ones home. Woodcock had flown in all directions, so I couldn't go after the whole flock. I figured the



**I SCOOTED AROUND** the tangle, trying to glimpse a movement in the distance to give me the edge at finding him one more time. I saw nothing.



easiest thing to do was maintain the direction the dog and I had been going.

Normally I carry my gun at port arms all day long, always ready to fire at an unexpected flush. But it was drooping at my side now and I was telling myself I was only going to shoot at properly pointed birds. But I was actually severely dejected.

Six woodcock coming off one point! That was an all-time high for me, but never to have touched a one of them tends to dim the memory, if you know what I mean. There never would be another point like it—but if there should be, my shooting skill would doubtless be far superior and change the entire picture!

Another point! The setter, too, was getting used to the abundance of birds, for this time there wasn't the old verve in his style. His tail drooped a little, he even cracked his mouth in a tired pant. Flush! Cheek! Lead! Miss! The top of an alder tumbled, only to be stopped halfway down by a neighboring alder. Its tipping to the right was slow, and my attention was with it rather than the fleeing bird. I marveled how the 8s had done so much damage to the pulp, while obviously doing nothing to the woodcock.

It was a sad day for shooting, so bad that even the abundance of birds

could no longer keep my enthusiasm up. But the hunter doesn't quit and go home when he knows he should. He keeps battering his head against the stone wall, for hope springs eternal that luck will change. Mine didn't. It was undoubtedly my most memorable bird production day ever, yet my shooting has never been worse. When the setter and I headed for the car, the thoughts of those misses buzzed around in my brain like a swarm of bees. I still had only that one little timberdoodle from early in the hunt to console my bruised ego.

From past experience I know woodcock are not hard to hit. They are not in the same league with the toughest of the tough, Mr. Ruffed Grouse. But they can teach a fellow to hold his place and never become overconfident about shooting woodcock or overconfident in any of life's other ventures. He's a challenge, there's no doubt of it. And just because you find the most bountiful woodcock cover on earth doesn't mean you'll come home with a full game bag. Now that the day has melted into the past and I can better reflect—the clouds, the cover, the setter, his bell, my shooting, all those points, and so many birds—well, I keep thinking about it, over and over and over. And maybe, when you come right down to it, that's what the hunting experience is all about.

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### Whitetail Deaths on Roads Still High

During the first six months of 1972, Game Commission employees picked up 9834 deer killed on roads in the state. During the first six months of 1971, the figure was 9485, and in a similar period in 1970 the toll was 8623.

Overall, deer mortality during the first half of this year was slightly below the figure for 1971. Known losses from January through June, 1972, excluding hunting, were 11,010, compared to 11,280 for the same period last year. In the first six months of 1972, farmers killed 174 whitetails because of crop damage. The figure for the same period in 1971 was 88. This year there were 559 deaths due to dogs in the first six months, contrasted with 946 for the first half of 1971 and 1786 during the first six months in 1970. Recorded illegal kills of deer in the first half of this year totaled 343, compared to 269 for the same period last year.

# Waterfowl Trophies

By Gene West



GENE WEST poses in his "duded-up" bush jacket, showing his favorite waterfowl gun, a Winchester Model 101 12 gauge, and some of his trophies.

**I**T WAS ONE of those cold miserable days; wind was driving hard particles of sleet in from the northeast, and even with insulated underwear and boots, down jacket and rain gear we shivered in the blind. With trembling hands and numb fingers, I gingerly opened a steaming thermos of black coffee and managed to fill the cup without spilling more than a

few drops. The thermos recapped, I held the cup of steaming brew, partly to warm my hands, partly to let it cool just a bit, knowing full well that it would scald my lips if I took a sip now. But I knew I couldn't let it cool long or I'd lose the stimulating, heart-warming effect I so badly needed from it. Sipping the strong, hot liquid, other thoughts passed through my mind; primarily I questioned myself as to what kind of fool could I be, sitting here shivering and freezing in a duck blind when I could be home enjoying the comforts of a warm hearth and blazing fire.

I was jarred back to the cold world of reality by my gunning partner's urgent whisper: "Here they come!"

All traces of discomfort were forgotten as I automatically sat the cup of coffee aside and with my other hand picked up my 12-gauge over-under. By this time Dave, on my left, had touched off a load of No. 2s and I saw a drake falling. I swung on another drake, dead ahead of me and still coming in with his wings set. Just as I slapped the trigger he veered upward, but not in time. I quickly swung to the right. By this time the remainder of the small flock had veered to the right. I pulled down on a hen that appeared just within range of my No. 4s. At my shot, the bird simply collapsed in mid-air. My com-padre slapped me on the back and complimented me on the nice shot—partly, I'm sure, because he was as surprised as I that I'd connected at that range.

Blondie, Dave's Golden Lab, had been quivering at our feet since the first shot. At his command she plunged without hesitation into the icy waters. My first bird, a mallard drake, was closest, and was the first she retrieved and dropped at our feet.



Dave said, "Fetch," and pointed to his left. Again she plunged into the icy waters, and in short order had located his drake. My second bird had come down in the fringes of some cattails. Apparently she couldn't see it, as she hesitated a bit before again braving the chilled water and swimming in the direction he commanded. Before long she had located my second bird and triumphantly delivered it to us.

First glance made it appear to be nothing more or less than a mallard hen, but as I picked her up I noted the band on her leg. Comments passed between us that she was the trophy bird, both because of the exceptional—and for me unusual—shot I'd made in bagging her, and also because she wore the band. I'd have been willing to call it quits then and there and go home, and the other ducks we bagged that morning all seemed somewhat anti-climactic. That otherwise nondescript mallard hen was the highlight of the morning's shooting to me, and meant more than the several larger, more brilliantly plumed drakes I shot.

Another time we were shooting at Smith's pond without a dog to retrieve the downed birds. A fairly brisk wind was blowing and the pond was small, not over three acres at most, so the downed birds would quickly drift to shore and one of us would gather them in when nothing was flying.

### Oddest Looking Critter

After the second or third flight had come in and the downed birds had drifted to shore, my hunting partner sallied forth to pick them up. Two were pintails, but the third was the oddest looking critter we'd ever seen. Further examination by a Wildlife Conservation Officer confirmed our suspicions: the duck, a drake, was a cross between a pintail and a mallard! Pretty, and far different from any duck we'd bagged up till that time.



**GREATER SCAUP** is one of the waterfowl species West has mounted. He finds these comparatively small trophies make attractive displays in den.

Though I'd done considerable goose hunting through the years, it had been strictly for the big Canada honkers under normal and orthodox goose hunting situations. Hence, it was quite a surprise, and a change for me, when several of us ventured way down to South Texas for some prairie goose shooting. First, the birds were different. Not only were they smaller than the big honkers I accepted as geese, but also several varieties were there—snows, blues, and speckled-bellies. And we took some of all. The snows, though not large birds, impressed me most, probably because of their beautiful, pure-white color. They almost seemed the same thing to waterfowling that Dall sheep are to big game hunting. Small, yet not as common as some of the others, and for the trophy hunter an exciting challenge.

Waterfowl can create many meaningful and warm memories for the hunter, and I think these examples will point out the potential of trophy waterfowl hunting. Many of us are waterfowl hunters, yet we never give a thought to adding a few such species to our trophy rooms. For an avid duck hunter, what could be more ap-

propriate than to have mounted that fine old drake you shot from an awkward, half-squatting, half-standing position as he came in while you were spreading out the decoys? After all, fully half of the joys of hunting come from reliving the hunts long after they've passed. What better help is there for recalling those days in the marshes and by the ponds or on the bay than to have a trophy or two of the hunt mounted. Seeing them will help you daily enjoy the thrill of the hunt and make the long days between seasons pass much faster.

### No Room For Caribou

Perhaps you'd like to have a few trophies of the hunt around the house, but because of space limitations there simply isn't room for the head from that caribou you got in Canada a couple of years ago. While not forgotten, it's now collecting dust in the attic. Well, even in the most limited areas, there's still room for a waterfowl trophy or two. Mounted with their wings spread, as if in flight, they fit nicely against any wall. Or mounted in a sitting or standing pose, they likewise take up precious little room. Smaller birds such as teal, wood ducks, and so on can easily fit right into a shelf of the bookcase . . . and what more distinctive bookend could you come up with?

Perhaps for an area above a stairway, you'd want to have one mounted with a full wing spread, as if in flight. They're beautiful that way, utilize space that is otherwise wasted, and constantly remind you of an eventful and enjoyable hunt.

Maybe you're like I am. You have mounted heads and racks from native whitetails, a rug from a native black bear, and another from the small cinnamon variety of the Southwest. You have some mulie heads and racks taken on hunts in the West, and an antelope head from Wyoming. Toss in a sheep head and maybe a moose rack and you have a trophy room

pretty well filled with memories of your big game hunting. But, big game hunting is limited, and after you get one good whitetail head, one good mulie, and perhaps a Pacific Coast blacktail, what's the point in having another head mounted? With big game, if you primarily hunt deer as most of us do, you can easily reach the saturation point on trophies.

Not so with waterfowl trophies! Sure, there's no more point in having half a dozen pintail drakes mounted than there is to having the same number of 4-point whitetail heads hanging on the wall. But after you have a pair of pintails (drake and hen) and a matching pair of mallards, why not concentrate your hunting to bring home a pair of golden eyes, say, rather than just shoot ducks? Then go after a greater scaup, and while you're in the blind waiting for him, pass up the easy shots at mallards and pintails. Next try to pick up a pair of widgeons for your collection, and again, rather than just shoot ducks, pass up the others till you can collect the ones you want.

Approached on this basis, waterfowl can take on an entirely new dimension. Rather than just shooting ducks, you'll start picking them out before you shoot. Chances are you aren't fully familiar with all of them, and as a result you'll study up a bit so the next time you go out you'll have a much better idea of just which bird you want to bag.

After having gone this far, you'll make up your mind that on your next waterfowling expedition you're going to bring home a canvasback drake, say, or some other specific trophy, or you're going to come home with nothing at all. Strange as it may seem, with such a goal you'll gain greater satisfaction from watching a flock of mallards swing by, well within range, and letting them go without firing a shot, realizing that the specific bird you're looking for wasn't there, than in taking just another limit of ducks.



# Poor Man's Quail

By Rev. George L. Harting

**T**O EASTERNERS, the word "quail" always suggests the bobwhite, a feathered bullet that, in covey strength, explodes from cover like a machinegun burst. Over much of the South, this is "the game bird," and outdoor writer Dave Beatie argues, "For wing shooting at its finest, head south when the winter winds begin to blow." But this demands extended vacations, guides, dogs, lodging—the luxury of the affluent. Most of us can't afford that suggestion, at least on a regular basis.

Fortunately, the variegated nature of Pennsylvania's terrain offers a substitute—"the poor man's quail." The popularity of dove hunting has increased steadily since this bird's inclusion on our game list. If one can afford a license and a copious supply of shotshells, the dove hunter is in business, for his needs are few and he will sight these desirable "slate birds" on main street (where he can't shoot them, of course), in cornfields and in the remotest lowland swamp. In at least four areas one finds our quail substitutes most desirable:



## Availability

In recent years, the limit on quail in Pennsylvania has been 4 per day and 20 per season, with an abundance of this species found only in certain parts of the state. By comparison, doves are found in most areas, they're commonly seen in large numbers, and a daily limit of 12, possession limit 24, is normal. The season also lasts a lot longer. All of which means that the average dove hunter gets more shooting and is allowed more birds than the quail hunter.

Some scorn the dove as a game species (these usually are persons who have not hunted them). "They sit in trees," they argue, "and game birds should not do that." In rebuttal I point out that no sportsman will shoot a sitting bird, in a tree or on the ground, and furthermore, this trait could well be the dove's salvation for it also nests in trees and thus is less likely to suffer predation or nest loss through agricultural operations, as often is the case with quail. Several broods a summer are not unusual with



doves, and even as late as September I nest birds have been observed in Lehigh County, I know. And imagine the delight I've felt in sighting 23 doves picking gravel in a suburban driveway on an August morning. Yes, the dove has a lot going for it.

### **Palatability**

"They're good eating," my buddy insists. For defense of this thesis, one need not argue the comparative qualities of quail or dove, but simply observe that each affords gourmet eating when masterfully prepared.

A minute is sufficient to dress a bird. Remove the wing at the first joint. Place both thumbs under the rear breastbone and break apart the back from the breast. Skin out and detach the breast but don't waste the rest! Salvage the heart, liver, and gizzard. Finally, with a circling backward then forward motion, break the legs from the backbone; skin these out and add them to the pot. Any number of special recipes can be found, beginning with the lowly potpie. For many, Bar-B-Q is rated tops.

### **Variety**

On opening day a very touching discovery was made. A senior citizen had placed an easy chair in a fence-row just north of a State Game Lands parking lot. When interviewed, it was learned that this sportsman was a World War I veteran whose right hand suffered severely from palsy. He held an autoloader of rather ancient vintage. To add to the wonder, on one side of the chair was a water cooler, and on the other an aluminum support, which he needed when he went to retrieve his game. When I returned to my car I learned that the veteran had bagged a passing dove. He was delighted with his success. Quail would hardly have lent themselves to this kind of setting.

In addition to pass shooting, jump shooting—walking doves up—puts this bird in his proper element. Find a grower who will trust you; convince him that you will simply walk the edges and not "bull" through his cornfields, and most likely you will be allowed to hunt.



Under these circumstances the pursuer and the pursued are equal. You will often have the advantage of in-range shooting and the half dozen birds you may flush as a flock will cause the loss of a heartbeat. As you interrupt their leisured dinner of fox-tail seed, they will erupt in as exciting a display of cunning and speed as could be expected of a covey of quail.

This early season migrant also offers dog enthusiasts their due; many articles describe successful efforts in the use of retrievers on dove hunts. If you haven't tried the sport, you're missing something!

### Competition

The uninitiated are likely to frown upon the idea of shooting these nice little birds that visit their backyard feeder and sit on nearby power lines; They are likely to taunt "Shame on you," suggesting that as game birds they're too easy. Many arguments have been waged on the subject. But the one that really put it to the critic was the deal offered by a dove hunter to a maligning neighbor: "Tell you what I'll do. I'll take you with me and give you a buck for each bird you kill, you pay me a quarter for each shot you fire and miss." A respectable marksman wanted the truth, so one year he kept record. His results were an expenditure of 2.39 shells per bird for the first 107 taken. This is a mark by which one can gauge himself. These little fellows have it all their way with their capacity to dodge and weave while they turn on the speed.

Quail are predictable, confining the covey activities to a limited area. In certain localities, it is asserted that for identification purposes the coveys are named or numbered. My limited exposure to the bobwhite would support this thesis. This suggests that while this little fellow tests the marksman-ship of the most skilled among us, he is, nevertheless, something of a predictable target. Such predictability is not a characteristic of the dove. It has well been stated that "The mourner



**HAROLD HARTER** squats between fence-row and cornfield, a location that many dove hunters like, because it hides them well but permits swinging the gun in most directions.

is where you find him," and one had better be on the alert at every moment to intercept him.

A sophisticated young lady recently introduced to dove Bar-B-Q was enjoying an exciting football game. Suddenly her companion threw his imaginary shotgun to his shoulder and exclaimed, "Bang! Bang! Bang!" By that time three doves already were winging over the opposite goalposts. The young lady's whetted appetite prompted her to respond: "Oh boy! More doves!" With the rest of us, she was casting her vote for the poor man's quail.

### Oven Barbequed Dove

Prepare double thickness of broiler foil, place dove breasts in center. On each place several pieces of bay leaf. Sprinkle generously with poultry seasoning and sauteed onion. Season with salt and pepper. Slice thinly 1 large Bermuda onion, pile slices on breasts. Lay strips of bacon on top of onions. Drizzle about a half cup of barbeque sauce over all. Using the "drug store wrap" seal top and one end of package. Tip package slightly, pour  $\frac{1}{2}$  cup water in the open end, seal completely. Bake in 350 degree oven for about 2 hours. To crisp the bacon, unseal top of package and place under the broiler for a few minutes before serving.







# Turkeys Ain't Smart!

It's the Crazy Things Turkey Hunters do that Make Them Look that Way

By Louis W. Stevenson

**T**URKEYS HAVE wonderful eyesight! Sure, but not compared to a hawk which will spot a small rodent or snake from a height of several hundred feet and dive unerringly to grab its prey. They are in entirely different leagues.

Turkeys will easily see a blundering hunter stumbling through the woods, kicking leaves, breaking brush, banging his gun against a tree and doing about everything possible to direct attention to himself. However, that same hunter could wear a blaze orange suit and sit motionless against a stump and have a turkey walk right into gun range. A quick move would scare the turkey, but what human wouldn't jump if suddenly a stump happened to move as he was walking by?

Turkey hearing is very acute. Sure, but what other wild creature would answer and come to investigate the variety of yelps, screeches, rasps and just plain racket that some hunters produce with a turkey call?

If a hunter uses a little common sense, his chances of bagging a turkey are excellent. But if he does some of the dumb things that I have done during my many years of turkey hunting, or things that I know of other hunters doing, his chances of ever having a wild turkey for Thanksgiving Dinner are remote.

Consider, for example, the season I took my wife and son for a ride in the mountains to investigate a report that a flock of turkeys had been broken up in a certain area. After parking the car, I left my gun inside, walked down the road about a hundred feet, and gave a few yelps with my call. From a clump of hemlocks a short distance away, a turkey answered immediately, and a moment

later a gobbler walked into full view, seemingly saying, "Here I am, what do you want?" By the time I had dashed to the car, grabbed my gun and got it loaded, the turkey was far away.

The next morning my wife and I went after that turkey the way it should be done, with the result that I brought a nice 19-pound gobbler home to the table.

Then there was the time I went hunting in Lycoming County with a friend who was a Game Protector. We were in the woods early and I got all set under a big hemlock tree. At daylight I called and received a quick reply, but couldn't determine exactly what direction the answer was coming from. This happened several times during the next hour.

Finally, after sitting motionless for a long time, I had to stand up and stretch my cramped muscles. What happened then? As you probably guessed, a whole flock of turkeys flew out of the tree I had been sitting under. I had a hard time explaining that to my hunting companion!

## Eight Turkeys

Another time, many years ago, I drove along a farm lane and stopped between two patches of woods, got out of the car without my gun, leaned against the car and tried a call. I thought there was an answer but a farmer's dog was making such a racket that I couldn't be sure. After several more calls with no reply, I drove on down the lane, turned around and returned to the spot where I first had called. I got out and repeated my performance, but still no answer. Feeling certain no turkeys were in that area, I started to get into the car, but happened to glance down

the lane to the place where I had turned the car around. There, about 50 yards away, in the middle of the lane, walking directly toward me, came eight turkeys. Naturally, by the time I had grabbed a gun, got it loaded and was ready to shoot, the turkeys were out of sight.

The next morning, Thanksgiving Day, I was in the woods early with three boys from a neighborhood family. We heard the turkeys leave their roost and when I called several came past and a boy shot one. Another boy also could have had a turkey, for a hen sat in a tree less than 50 feet away, but his gun wouldn't fire as he had failed to completely close the action.

I once sat for a couple of hours trying to call in a turkey with no result. Deciding to move to another location, I laid down my gun, picked up the pillow I had been sitting on and happened to look in back of the stump I had been leaning against. There, on an old stone fence, stood

a nice big turkey surveying the entire performance. How long it had been there I had no way of knowing, but if I had looked around carefully before moving I could probably have got my bird right there.

A friend went out one morning, called two turkeys into easy shooting range and when he carefully raised his gun and pulled the trigger, all he heard was a click. He had forgotten to load the gun. Even then the turkeys didn't leave. Only when he dropped his shells in his hurry to get the gun loaded did the birds decide that they had better depart.

### Fine Tone!

And then there was the time I was hunting with a friend and we decided he would remain in the valley and I would climb a short distance up the mountain. We separated, got to our respective hunting spots, and I started to call. No turkeys answered but I could hear my friend calling down below. Nothing happened, so after awhile down the mountain I went. I met my buddy and complimented him on the fine tone of his call. He told me he didn't have a call with him and that it had been a turkey answering me. Just another case of a dumb hunter!

A few years ago a group of us were hunting on Rattler Mountain south of Wellsboro. One fellow had been sitting at a spot overlooking a small valley. His calls had produced no answer. When he heard some rabbit hunters and their dogs below him, he decided that turkey hunting at that spot was finished for the day. He was sure of it when one of the beagles started to yelp in the laurel just below him. In disgust, he stood up to leave just as the beagle came out of the laurel—it was a big turkey gobbler screeching like a beagle hot on the trail of a rabbit. He managed to get off a shot as the gobbler got airborne, but was so surprised he missed.

Later in the day it started to rain



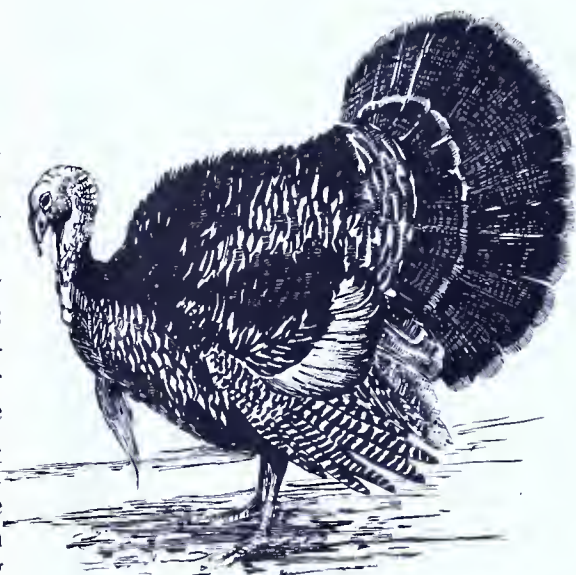
**A TURKEY ANSWERED** my call immediately and a moment later walked into view. By the time I had dashed to the car, got my gun and loaded it the big bird was far away.



and another member of the party wrapped his Browning over-under in a plastic slicker to keep it dry and headed down a trail to the car. As he came around a bend he met a turkey headed up the trail within easy shooting range. But before he could get the gun unwrapped the turkey was out of sight.

I once called and got a quick reply from a gobbler. Several more calls over a period of at least an hour produced no answers, so I started for another spot to hunt. I hadn't gone a hundred yards when I heard a loud gobble in back of me. Looking back I saw the turkey, standing not three steps from the place where I'd been sitting. I just hadn't waited long enough.

Last spring, during another gobbler season, my brother-in-law Bob, a friend from a neighboring state and I got all settled in the early morning hours at a location where I knew there were several gobblers. When it was light enough I called and a gobbler answered. It kept calling and moving in our direction. I had shot my turkey the previous fall and consequently was not carrying a gun. That doggone turkey came to within 20 yards of me, strutting and gobbling like the King of the Forest that he really was. He was the largest wild turkey I have ever seen. Bob could see all the action, but instead of getting ready to shoot he waited until the turkey had moved to within range before he raised his gun. The turkey saw the movement and started to run. Bob shot and missed. Had he got ready when he first saw the bird he would have had the prize of a lifetime.



**IT STARTED TO RAIN** and my buddy wrapped his Browning in a slicker to keep it dry as he headed for the car. That's when he saw a turkey — and couldn't get his gun unwrapped.

We remained at the same place and about a half-hour later another gobbler answered. We saw him come out of the woods, across a field from us, accompanied by a small gobbler and a hen. He headed toward us, gobbling all the while. Bob decided he should get into a better hiding spot and started to move. The turkeys saw him and beat a hasty retreat. Had he remained still, they undoubtedly would have come right to us.

Only one thing is sure about turkey hunting—you can never be sure what the birds or the hunters will do. Every season something proves my contention that it's not the turkey's fault he isn't making a fine dinner for some hunter and his family. It's the hunter himself.

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### These Critters Have Taking Ways

Crows are feathered pack rats. They often collect bits of colored glass, bright metal objects and shining plastics which they store away and then apparently forget. Tame crows can be troublesome because they're all kleptomaniacs!



# Shotgunning For Gray Squirrels

By Byron W. Dalrymple

**DALRYMPLE USES** his call here with success—but that is not always the case. Calling takes considerable know-how.

**F**OR YEARS I'VE been a real sucker for squirrel hunting. I believe boyhood experiences have much to do with our enthusiasm throughout life. And it was a brace of squirrels that made my very first hunt with a gun. They were, as it happened, fox squirrels that lived in a small woodlot on the farm where I spent my boyhood.

We had no deer, no grouse. My brother and I had trapped a few cottontails long before we were allowed to have a gun. But even fox squirrels, which hide instead of running like grays, were too sharp for us. And so the moment I got hold of a gun, an ancient single-barrel 12 gauge, I was off to catch up on those squirrels.

Later on I was introduced to the gray squirrel. That clinched it. For here indeed is the squirrel that is the ultimate in small game animals. It is, in fact, the sportiest of our small game animals, and a truly wild creature. The fox squirrel loves the farm woodlots and proximity to civilization, but the gray is a wilderness spirit, shy as the ruffed grouse and the whitetail, fundamentally a forest creature that spends little time waiting around to peer out at possible danger, undecided. Like the deer, it vanishes first and takes stock later.

I have hunted grays with both rifle and shotgun. I have been criticized now and then for mostly employing the shotgun. It doesn't bother me. Shooting a treetop running gray that leaps from tree to tree is about like shooting grouse. With the scatter gun I get to eat a few at least, and I can stand quite a bit of criticism if it is



topped off with a light crusted gray squirrel potpie.

It amuses me to recall a hunt I made last year with three companions. We were walking through a stand of mixed hardwoods, with much oak. We had agreed to take turns shooting. One of our group was shooting a 20 gauge and it was his turn on the next squirrel sighted.

As experienced gray squirrel hunters know all too well, when a strolling hunter walks toward or under a tree with a gray squirrel in it, nine times out of 10 the squirrel does not move around to the far side to lie doggo. It takes off in high. This gentleman spotted one as it rocketed across an opening, leaping to the next treetop. He fired at it "on the wing."

"Way behind," one of us said as leaves and twigs rained down.

### Leaves and Twigs

The hunter dodged around a little bit, trying to keep the squirrel in sight. He fired again. More dead leaves and twigs. We saw another gray flash. He fired a third time. No contact. At that moment, as if it was all planned, the squirrel ran out on a dead limb, an easy shot, paused to take stock, and did something a gray, usually silent under stress, seldom does. It looked at the shooter and let fly what seemed to be a fine burst of profanity. My companion raised his gun and pulled. But the hammer just clicked. He'd forgotten in his excitement that he'd fired his third shot. Instantly the gray was gone.

Pennsylvania hunters are fortunate to have an ample supply of gray squirrels and plentiful public lands on which to hunt them. Although the gray is exceedingly popular, there is still room for newcomers. In fact, one impressive attribute of the gray is that its inherent wildness and preference for the forest allows it to colonize in far-back sectors that seldom see many hunters. Seek such spots and you just may find a real bonanza, a local squirrel population built up to high density



**SQUIRRELS OFTEN LEAVE** signs of their presence—cuttings from trees, ear corn as here, etc. The hunter should keep on the watch for such things.

and totally unhunted.

One winter a few years ago I was snowshoeing in a remote piece of timber, shooting scenes for my negative file. It was a bright day, not especially cold. Suddenly a swift movement caught my attention. It was a squirrel. And it was a shiny jet black.

Now melanism—occurrence of dark, or black, individuals—is fairly common among squirrels, and it is especially common among gray squirrels. I recall that for many years in northern Michigan ill-informed legislators kept a closed season on "black squirrels" but it was open on grays. The fact was that the blacks were just color phases. They were grays. And in some places the gene was so dominant that all the squirrels were black.

At any rate, I now recognized this handsome creature as an especially large squirrel. And as I moved through the area I saw several more, plus paler individuals and regular grays. I had

stumbled upon a back-in squirrel haven I doubt had ever been hunted. I noted it well and the following fall I had several good hunts there.

In the average good squirrel year, the total Pennsylvania harvest is estimated to be at least 2.5 million. Probably 95 percent or more of these are grays. Fox squirrels are present only in a few very specific locations in the state.

Most good grouse woods is also good gray squirrel habitat. The reverse, incidentally, is not always true. Gray squirrels easily do without the openings, and undergrowth, needed by grouse. You should also check out farm woodlots, and stream bottoms with woods and fields. You may pick up a few fox squirrels when you come down off the ridges where most of the grays are in residence.

One fact newcomers to squirrel hunting should know is that these animals, especially grays, are extremely cyclic. They're susceptible to nu-

**MANY SQUIRREL hunters prefer a rifle to a shotgun, but for grays scuttling through tall treetops, the smoothbore provides the only answer, Dalrymple feels.**



merous illnesses, often launched by pests such as mites, fleas, ticks, and also by bacteria. Because they are modestly gregarious, epidemics spread swiftly and occasionally decimate a population. Most common, however, are low-cycles caused by poor litter survival due to food scarcity. Grays, which do not have available the supplements of farm grains that fox squirrels usually do, must survive on mast, wild fruits, buds and other forest forage. During a year of low food production in their habitat, survival is low. Many a beginning squirrel hunter has given up, assuming squirrels were so scarce they weren't worth hunting, when in reality he has launched his initiation during a severely low cycle. Squirrels are prolific and come back fast when conditions are favorable.

### First Light

Gray squirrels are most active from the very first light until about mid-morning, with the first hour the best, and then again from late afternoon until dark. One of the best ways to hunt them is to do a bit of midday scouting first. Let me illustrate.

Last year a friend and I moved carefully through a stand of timber, seeking signs of squirrels. We happened to find an enormous old beech that had turned out a bounteous nut crop. Careful searching on the ground uncovered evidence that squirrels had been eagerly harvesting beech nuts, a favorite food. The trunk of the tree was a criss-cross of claw scratches. A single tree like this may host a whole family of grays.

We selected spots where we would sit, one on one side, one on the other. We arranged these stands so squirrels leaving the tree would be in range of one or both of us as they passed to nearby, smaller trees. Well before dawn, we crept silently into the forest. We had light shotguns, and No. 6 shot because squirrel hide is tough and the forage tree was tall.



We had cleared sitting places the day before, so no dry leaves or twigs would give us away. Now we took positions, each with his back against another large trunk. We sat absolutely silent and immobile. The first squirrel chuckled quietly before light was remotely good enough to let us see. Presently we could hear the rustle it made coming through treetops. Another squirrel soon barked from the opposite direction. This one I suspected was on the ground.

Shortly, I saw the first one directly above my partner's head. It leaped into the beech. In a few moments another appeared without announcement, following. Then the one on the ground raced across the leaves and a few feet up the beech trunk. Suddenly it spotted me. It clung to the trunk, staring, muttering in excitement. I dared not even breathe.

We were undone, that was almost certain. The squirrel dropped to the ground, chattered at me again. Now I realized that it had no real idea what I was. It was simply jittery. At last to my great relief and with no further talk it leaped again to the trunk and went on up. I breathed again.

### Three In Range

So now we had three squirrels above us and in range. Excitement was rising, but we had agreed to wait until I gave the signal. From behind me a fourth made a small chuckling bark. I decided to gamble. The seconds seemed long. But finally I saw this squirrel leap to the beech and another was with it. That was all I could stand.

Slowly I raised my gun. The squirrel I had in mind instantly saw the motion. It started to run along a branch. I fired. At almost the same moment I heard the other gun. Then both of us were getting off second shots. We did, and we had in that few seconds of heady action gathered four plump grays. How the fifth got away unseen we'll never know. That experi-



*Photo by Leonard Lee Rue, III*

**SQUIRRELS ARE** one of the most popular game animals in Pennsylvania, with some 2½ million harvested annually. Besides providing much sport, they are excellent on the table.

ence proves, however, that careful scouting plus patience pays off in this sport.

Some hunters are good at pussyfooting through gray squirrel woods and taking limits. I take a completely different tack that I believe works as well. When a man in the woods tries to be silent, he usually scares heck out of any truly wild creature. Thus when I walk 'em up, I get on a ridge early or late and walk briskly, meandering back and forth, always looking both above and on the ground ahead. I make no attempt to be quiet. It is surprising how many grays, which certainly have heard my progress, will tarry a bit too long.

Have you ever shot at a running gray squirrel on the ground? I doubt there is any small animal as fast and erratic. It dodges and twists, hits all fours two feet up on a tree trunk, bounces off and keeps going, finally ascends at full tilt the tree you least expect, only to leap from the top and keep going. I've seen them jump 30 feet or more to the ground and smack the leaves running. Thus, this walk-'em-up shooting can be sporty indeed and it is no project for a rifleman. The scattergun is difficult enough in dense forest.

There are other ways to have im-



**DALRYMPLE PAUSES** on hunt to study tree which may attract squirrels. Fox squirrels generally use fencerows more than grays, which prefer big woods.

mense enjoyment with gray squirrels. One is to call them. In my opinion the gray is much more difficult to call than the less wary fox squirrel. But therein lies the challenge. Calling is not practiced nearly as much as it

should be. It is a most intriguing sport.

The first lesson to be learned about calling gray squirrels is that no treeful of them is going to mob you the moment you sound off. In fact, unless you learn to do an expert imitation of gray squirrel talk, all you'll do is run them off or caution them to silence. I'm not certain if a record or tape is available with actual squirrel voices on it. I would not be too enthused over some unknown caller's recording of his own imitation. It may or may not be a good replica. The best way to learn gray squirrel talk is to take lessons from the animals themselves. Find a courthouse square or some other spot that has gentle squirrels. If you can't locate any, you'll just have to get out in the squirrel woods and sit down and listen. It may take days, but it will be the most valuable squirrel *hunting* practice you can experience. However, tame town squirrels will teach you more quickly.

### Watch Them Talk

This also gives you perfect opportunity to watch them as they talk. Their sounds and inflections form a definite language. Study the detailed instructions that come with your call, before you listen. These will help you interpret. Soon you will learn that certain sounds are warnings, some are anger at other squirrels, and some others are used as communication, to identify whereabouts. All have their uses. But you will soon learn that the gray as a rule is not excessively talkative. The basic use of your call will be to help you *locate* and *reassure* squirrels near you.

As an example, last season I sat hidden in bushes at dawn near what I surmised was a feeding tree. There was no breeze. The forest was absolutely still. For 15 minutes nothing happened. I was about to leave when I was sure I heard quite distantly and to my left the subdued chuckle of a gray. Just two or three notes. For five



minutes I sat, forcing myself not to be hasty. Then, muffling my call in cupped hands to help cover errors—since for all I knew the squirrel had moved silently closer—I answered with a brief series of notes.

Instantly the squirrel replied. I didn't. I sat tight. In about three minutes it chuckled again, this time much closer. I was about to reply when from my right a second squirrel saved me the error. Fine! I let them talk to each other. They moved right to the tree—and without changing position or arising I bagged them both.

On other occasions I've had grays reply but refuse to come. When that happens, you should get the location pinpointed and move toward it, keeping hidden by tree trunks and calling occasionally. Now and then this works fine. Always remember that as in turkey calling too little is better than too much. The type of call you use is not important—squeeze-bulb, metal striker, wood striker—as long as you practice until your technique is error free. I personally like the bulb type. It can be tapped unobtrusively against your palm, gun stock, a log, tree trunk, or even the ground.

The absolute ultimate in squirrel hunting, a method practiced little in today's hurried age, is with a well-trained squirrel dog. Almost any dog—small, large, mongrel,—will serve. Training, in case your time is limited, can be mostly a matter of letting nature take her course. In gray squirrel habitat dogs should be broken of chasing deer. This is why I recommend to average hunters a very small dog, perhaps some pint-sized cross breed that can't get far chasing a deer anyway.

With experience a squirrel dog learns to pick up scent either in the air or on the ground, whether the squirrel is in a tree or foraging below. Then the dog races away, but it runs by sight as well as by scent. Good ones have an uncanny ability to judge fresh ground scent, which tree a squir-

rel is in, and when it leaps to another tree. The better ones even know when a squirrel has gone in a hole. Such a dog will immediately cease barking at the tree, and give up.

Regardless of how you hunt, learn to recognize squirrel signs. Begin scouting even during spring and summer. They are good times to locate heavy squirrel concentrations. The animals love wild fruit. I've seen a half dozen in early summer feeding in a single big mulberry tree. Apples, wild cherries, and other fruit ripe in late summer and early fall also draw them. Check carefully for sign around such forage. Partly eaten fruit, twigs snapped off and lying on the ground, scratches on the tree trunks, all tell what is happening.

### **Favorite Foods**

After frost, wild persimmons appeal to grays. So do wild gourds, in which they cut holes and then scoop out pulp and seed. Hickory nuts and acorns are of course favorites. Black walnuts are avidly gathered. Watch for signs where nuts or acorns have been dug from beneath leaves, or buried. "Cuttings"—the shells or husks of nuts and the ends of twigs from which buds or green food have been eaten—often lie thick under a good squirrel tree.

Although grays are plentiful today, it's interesting to imagine what shooting was like in pioneer days, before forests were cut. For example, over 200 years ago Pennsylvanians collected a bounty of three pence per gray squirrel scalp. Some years thousands of pounds in sterling were paid in this manner. The animals swarmed in unbelievable numbers and were extremely serious pests to crops.

It's as well they're not that plentiful nowadays. There are still ample numbers for good sport and under proper management they sustain themselves admirably. Gray squirrel hunting is one of the ultimates in forest enjoyment. A forest without these sprightly creatures would lack one of its most appealing dimensions.

# A Look at Ducks

By Eugene R. Slatick

**D**UCKS COME INTO their own during the cold months of the year. From fall through early spring, most of the colorful songbirds are in the South and the birds that stay with us are generally quiet, but migrating and wintering ducks add a tinge of excitement during this time. A somewhat unmelodious *quack* from the reeds in a marsh or the sight of a raft of ducks bobbing on the cold waves reminds us that Nature is now presenting another group of its birds.

The ducks we find sprinkled across Pennsylvania's wetlands and waters can be grouped into two basic types—puddle ducks and diving ducks.

The puddle duck, or dabbling duck, prefers the shallow waters of marshes, ponds, and small rivers. The mallard is a typical puddle duck. It feeds by reaching down into the water with its head. It often "tips up" to get at some plants that are a little deeper. This is an amusing sight. The duck tilts over vertically, half submerged, with its tail up and feet kicking to hold that position. Puddle ducks can dive, but they don't often do so. You can tell a puddle duck by the way it takes off—straight up, like a rocket launch. A puddle duck can walk, or waddle, relatively well on land, at least in comparison with most diving ducks.

## Runs on Surface

The diving duck is a bird of the deeper waters, although it is often found in the company of puddle ducks. The canvasback is a typical diving duck. It dives and searches for food underwater. When taking off, the diving duck "runs" along the surface before becoming airborne. (The bufflehead and hooded merganser, however, sometimes flush straight up, like a puddle duck.) Watch a diving duck waddling on land and you will realize what is meant by the expression "like

a duck out of water." In contrast to its graceful way in the water, the diving duck is noticeably awkward on land, because its legs are short and close to the rump, not near the body's center of balance.

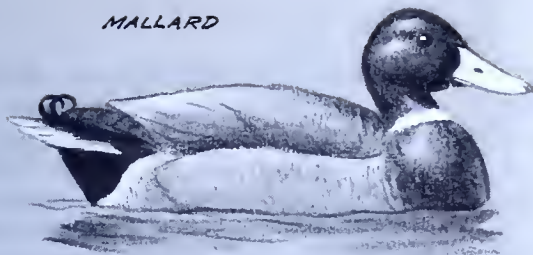
Both the puddle duck and the diving duck are well designed for a life on the water. In fact, many of the same features that help them fly also help them float. The feathers are light and contain countless tiny air spaces that provide buoyancy. The feathers are also water repellant, and the duck has a natural oil gland in its rump to keep them that way. When the duck preens, it rubs the oil gland with its bill and then works the oil into the feathers. This grooming, which is done often, waterproofs and conditions the feathers. The duck's air sacs (which all birds have in addition to lungs) also add buoyancy, and the webbed feet make good paddles to move that buoyant body around in the water.

Although both types of ducks can go underwater, the diving duck is especially suited for such excursions. When it is about to submerge, the diving duck releases some air from its sacs, compresses its feathers to force air out, and then dives—all in one quick, smooth motion. By comparison, the puddle duck dives with a splash and more difficulty. Once under water, the diving duck can maneuver very well because its feet are near the rump, where they act like propellers and rudders. The hind toe of the diving duck even has a fin-like flap.

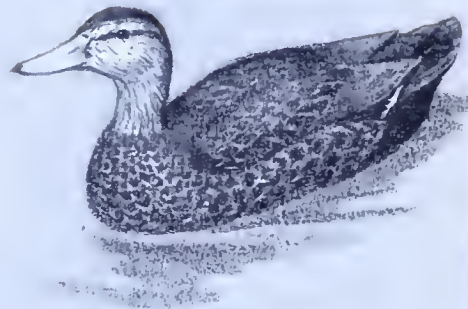
The duck generally stays within a depth of three to six feet. Old squaws, however, have been caught in fishing nets set at about 75 feet. A dive usually lasts for less than a minute, but it can be longer. This is possible because a duck has, in a sense, a built-in aqualung. An extra amount of oxygen can be extracted from the



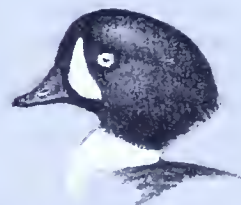
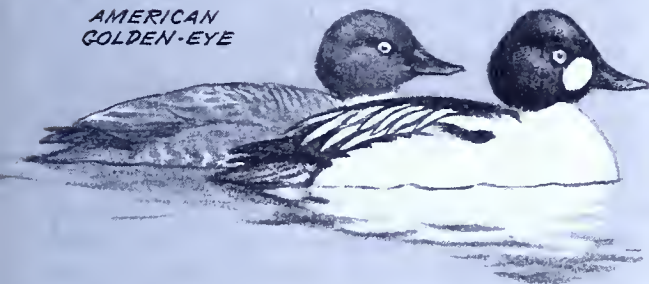
MALLARD



BLACK DUCK



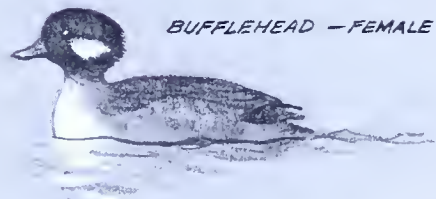
AMERICAN  
GOLDEN-EYE



BARROW'S  
GOLDEN-EYE



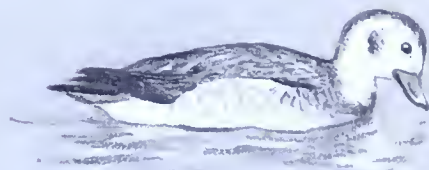
BUFFLEHEAD - MALE



BUFFLEHEAD - FEMALE



OLD-SQUAW - MALE



OLD-SQUAW - FEMALE

WHITE-WINGED SCOTER



AMERICAN  
SCOTER



SURF SCOTER

blood and muscles to supply the vital organs. Furthermore, the heartbeat slows down during a dive, so the rate of oxygen consumption decreases. Even the duck's eyes adjust for better underwater vision.

The broad, flat bill of a duck looks unwieldy, but it is just what's needed for prying and sifting food from silt and water. The bill is firm and hardest at the tip, but the sides are relatively soft and lined with sensitive nerves that can detect food, even in muddy water and in the dark. The bill can handle a mixture of mud, food, and water without much difficulty. While the water drains out, the tongue sorts out the food. Many ducks have fringed tongues to do such sorting. The mergansers—the fish ducks or sawbills—have a narrow bill lined with toothlike projections to hold the slippery of fishes.

#### **400 Kernels Per Meal**

Puddle ducks feed mainly on plants. Many of them, especially the mallard and pintail, are lured to harvested grainfields, where they can find such choice foods as corn, wheat, and barley. According to one report, a big drake mallard can eat up to 400 kernels of corn in one meal. Another report estimates that, on the average, a bushel of grain will feed about 125 ducks for a day. Of all the puddle ducks, the shoveler eats the most animal food. Its diet averages about two-thirds plants and one-third small aquatic animals.

Several types of food make up the menu of the diving ducks. The inland divers or bay ducks feed mainly on plants, whereas the sea ducks feed mostly on animals such as mollusks, crustaceans, and insects. Some of these ducks occasionally eat small fish. The mergansers, however, are primarily fish eaters.

The ranking of a duck on the dinner table is related to its diet. The favorites, those that eat mostly plants, are the mallard, black duck, pintail, redhead, and canvasback

Because a duck has no teeth, it must swallow a little grit from time to time to keep its gizzard supplied with grinding material. This can be hazardous in a heavily hunted marsh, where lead shot pellets might accumulate in large amounts in the mud. A duck can develop lead poisoning if it swallows too many pellets. Sometimes they pass harmlessly through the bird. Other times they stay in the gizzard and wear away, slowly releasing lead to the body. A mixture of corn and shot pellets reportedly is particularly deadly, apparently because the kernels make the pellets wear away faster.

Compared with other birds, ducks lay a lot of eggs—an average of about a dozen. Most ducks nest on the ground, but a few select a hole in a tree or a box off the ground. Late spring through early summer is the time for the eggs.

After three to four weeks of incubation by the female, the eggs hatch and out come the chicks, fuzzy with down and ready to start life. Raising the ducklings is the mother's responsibility. The drakes leave when the female starts incubating. (The male ruddy duck is an exception. It doesn't incubate, but it does help raise the young.)

Most male ducks have a very good reason for abandoning their families—they begin to molt their feathers. All the flight feathers are lost within about a day, and the ducks can't fly and are especially vulnerable to predation. During this period, which starts about June, the drakes search out an area where they can swim and feed in safety. (By contrast, most other birds lose their flight feathers gradually and are always able to fly.) The duck loses the plumage of the body and tail at a slower rate. It is replaced by drab feathers similar to those of the female. This plumage helps conceal the drake during its flightless period. At this time the drake is said to be in "eclipse plumage"—its brightness is temporarily gone. Still the outfitting is not over.



In August or September, after the flight feathers have grown back, the drab plumage begins to molt. By November, most drakes are able to show off their usual colorful plumage.

The female also molts its plumage, including the flight feathers, but not until after the nesting season. Some of the body and tail feathers are molted in late winter. As for the ducklings, their downy coats are replaced by feathers in about three weeks. The flight feathers are fully developed by the time the young are about three months old. Most ducks have to wait until they are about 15 months old before they have full adult plumage.

As it happens, at about the time the drake's plumage is new and attractive and the ducks start migrating down the flyways, the waterfowl season comes around. Just how well hunters do with the various ducks is indicated by a survey recently published by the U.S. Fish and Wildlife Service for the years 1967-69. As many hunters probably would guess, the mallard holds

first place in the U.S.; it accounted for about 32 percent of the total harvest of all ducks. Next is the green-winged teal (about 12 percent), followed by the pintail (11 percent), and the American widgeon (8 percent). By comparison, in Pennsylvania about half the ducks taken were mallards. The wood duck ranks next (about 20 percent), then the black duck (13 percent), green-winged teal (5 percent), and the blue-winged teal (3 percent).

During this time of the year you may look for a "sord" of mallards, a "spring" of teal, a "company" of widgeon, or a "raft," "plump," "brace," "team," or just a couple of ducks. You may call the mallard a "greenhead," the wood duck a "summer duck," the black duck a "black mallard," the lesser scaup a "bluebill," the American widgeon a "baldpate." No matter what, there are several million other persons doing the same thing—looking for that interesting waterbird, the duck.

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### The Types of Ducks

*Puddle Ducks:* Mallard, Black Duck, Pintail, Gadwall, American Widgeon, Shoveler, Blue-winged Teal, Green-winged Teal, Wood Duck.

*Diving Ducks:* "Inland Divers or Bay Ducks"—Redhead, Canvasback, Ring-necked Duck, Greater Scaup, Lesser Scaup, Common Goldeneye, Bufflehead, Ruddy Duck. "Sea Ducks"—Oldsquaw, Common Scoter, White-winged Scoter, Surf Scoter. "Fish Ducks"—Common Merganser, Red-breasted Merganser, Hooded Merganser.

### Top Ten Ducks Harvested in 1967-69

(Source: U.S. Fish & Wildlife Service)

Pennsylvania	Atlantic Flyway
Mallard	Mallard
Wood Duck	Black Duck
Black Duck	Wood Duck
Green-winged Teal	Green-winged Teal
Blue-winged Teal	Ring-necked Duck
Lesser Scaup	Lesser Scaup
Bufflehead	American Widgeon
American Widgeon	Greater Scaup
Greater Scaup	Blue-winged Teal
Ring-necked Duck	Bufflehead

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### Just Don't Bother Me!

In spring, muskrats often leave marshes and seek food in plowed fields. At that time the little paddletail is frustrated and angry, even likely to charge a human encroacher with much frenzied chattering and clashing of teeth.





# Last Day in the Field

By Bill Ingham

**I**T WAS ONE of the rarest of days, a day bursting with the promise that something wonderful was destined to happen. Unfortunately, it was also the last day of an exceptionally satisfying season in a hunting career studded with contentment. The two red setters trembled with excitement as the hunter carefully pulled the station wagon to the side of the road. As soon as he opened the tailgate the dogs bounded out of the car and tried to examine every blade of grass within a 50-yard radius.

The hunter smiled at their eagerness and felt the old tingle of excitement himself as he uncased the battered old 12-bore pump that had been his constant companion for the past 23 hunting seasons. He looked at a world that was his alone for the day and saw the breathtaking beauty of a late November sunrise that splashed vibrant colors across the eastern sky. A crisp frost covered everything with an exquisite white lace, a frost that blinked into sparkling diamonds that captured tiny rainbows as the sun gently warmed the new day. Wood smoke perfumed an air that hinted of the snow and cruel winds to follow in a few short weeks.

Almost unwilling to tear his gaze away from the spectacular sight, he set off in pursuit of the setters. They were hardly more than mahogany blurs at the end of the field. His cheek muscles knotted when he saw how far the dogs had strayed. They had forgotten all of their training and were scattering the pheasants he knew would be nesting in the soft, snug clover. Then, slowly, a grin took the place of his frown. After all, the dogs deserved some fun after their fine performances throughout the season. Soon they would settle down to do the work they had been created for. Sure enough, they were heading back

with their heads down, their puppy-surge over for the day.

A cornfield butted against the road and he walked around the end of it and into a weed field. He disliked cornfields. The drooping stalks and the rusty brown streaks that marked the leaves and ears always affected his mood. They were a far cry from the towering green giants of dove season and always reminded him that he wasn't getting any younger. The setters came up, and he carefully fed three shells into the pump, waved the dogs ahead, and moved out.

## An Old Hedgerow

At the end of the cornfield was an old hedgerow, complete with an ancient rail fence and chuckling stream. Beyond that beckoned several acres of tall foxtail grass that had yielded a couple of birds earlier in the season. The dogs knew where they were heading and quickly slipped under the bottom rail of the fence. When he got there, the setters were belly deep in water, greedily lapping at it as if they had just discovered an oasis in the middle of Death Valley. It was all part of a comfortable plan that had been acted out many times in the past.

He pushed through a tangle of old raspberry bushes and walked along the inside edge of the grass field, knowing the dogs would check out the fencerow quickly and thoroughly and meet him at the far corner. They made a wide circle and headed back to the rail fence. Suddenly, the lead dog got a whiff of something. She started to snake along, head down and neck outstretched, tail working like a windshield wiper in a hurricane. There had to be a bird moving ahead of her, and it was rapidly running out of cover.

The hunter quickened his steps, gun

at high port, and hurried to the corner of the field. The setter was scurrying about, trying to pick up the scent that had suddenly evaporated. He grinned at the dog's confusion. It was clear to the hunter what had happened; the bird had sneaked out ahead of them and flown away while they were at the other end of the field. Obviously, it wasn't there now, so he relaxed. He pushed through the briars, crossed the fence and paused to look for the dogs. They should have been ahead of him, but there was no sign of them.

### Stiff as Pokers

Spinning around, he saw both dogs, stiff as pokers, pointing at a tiny clump of grass he had just passed. No bird could sit that tightly, he thought, but he decided to check it out just to keep the dogs happy. As he was back-tracking through the raspberry tangle that bayoneted his well-worn hunting pants, a magnificent ringneck burst out of that unlikely tuft of grass like a rocket on the Fourth of July. Reflex brought the gun to the hunter's shoulder, and the aged pump roared three times like a brand new auto-loader. But the rooster's nerve-shattering takeoff had done its work well, and the bird planed unharmed over the tops of the distant trees.

Sheepishly, the hunter stuffed fresh loads into his gun and carefully avoided looking at his dogs. From past experience he knew what it was like to have those big hazel eyes boring into his very soul and it wasn't a very comfortable feeling. Picking up the spent shells, he placed them in an empty pocket so that they could fill a date with the reloading press on some snowy winter evening in January or February.

Regaining his composure, the hunter waved the setters toward the little woods. They obeyed rather sullenly, casting a few dirty looks in his direction and seeming to mutter uncomplimentary remarks in Gaelic about his marksmanship.

Crossing a barren field on the way to the woods, a small but highly productive game pocket, he remembered the action this tiny patch had produced in past years . . . a most satisfying double 15 years earlier; the red fox; the day his setter pup sliced a foreleg on a broken bottle; deer prints where deer prints had no right to be; hunts with his brother who would hunt no more; and, most important, sharing his love of the fields with a son who would one day fill his own boots in the world of the hunter.

The setters waited for him at the edge of the woods. They had forgiven his sloppy shooting and were ready to let bygones be bygones. As customary, he took the upper inside radius of the curving woods and waved the dogs on. Flocks of doves fled at his approach, their rheumatically creaking wings carrying them away at supersonic speed. They were the smart ones that had waited until the season was closed before heading south for the winter. As the setters neared the end of the woods, some pheasants flushed ahead of them, but they were too far away to identify, let alone offer a shot. About half a dozen of them, he judged as they skimmed over the edge of the rolling farmland and dropped out of sight.

At the end of the woods, he sank wearily to the ground, dug a crushed ham sandwich out of his pocket and carefully shared it with the panting dogs. He looked at the blazing colors of gold, red, orange and yellow that dazzled the hills sheltering Schoeneck. The breathtaking scene was framed by the impossible blue of a crisp autumn sky. He hadn't seen another soul all day, but in the distance he could hear the cheers and screams as Cocalico High School fans told the world that their football team had done something mighty impressive.

The setters finished chewing the burrs out of their feathers and were ready to go back to work, so the hunter got slowly to his feet. Perhaps it was just his imagination, but it



seemed that the hills had gotten considerably steeper during the summer and that his trusted scattergun had put on a little weight. He looked ahead. Their objective now was a tall golden grass field that offered some exciting possibilities.

Midway through the field, the thought occurred to him that there were few sights more beautiful than a brace of Irish setters working perfectly in amber grass with a background of distant white farm buildings, frost nipped leaves, and a clear sky that was as blue as ink. No sooner had the thought crossed his mind when another perfect picture was there! His setters were frozen on point directly in front of him. A gentle breeze softly stirred their feathers as they tremblingly showed him where the ringneck—and somehow he just knew it was a ringneck—was crouching.

With cotton-dry mouth, a heart that threatened to escape from his chest, and petrified trigger finger, he cautiously stepped between the two dogs. Countless generations of instinct took charge of his whole being and the hunter became a primitive man trying to provide food for his family. The bird catapulted, his streaming tail feathers whipping wildly with the concentrated strain of his effort. The old 12-bore performed its special kind of magic and the beautiful ringneck fulfilled his reason for being. Regally, the old setter brought its precious gift to her master and gently laid it at his scarred boots. Almost wistfully, the hunter lifted the bird with sad-proud gentleness, and smoothed the lightly ruffled feathers. It was a gesture he had performed more than a hundred times in the past, but one that never failed to fill him with pride and humility at the same time.

Throughout the remainder of the afternoon they wandered the fields.

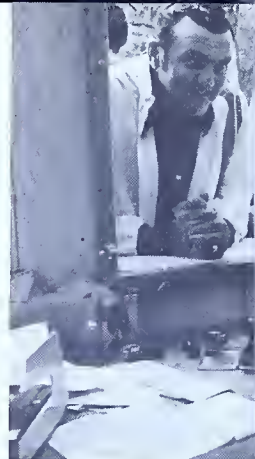
The dogs made a couple of half-hearted points on hen birds and bounced out a rabbit or two as the day wore on to its inevitable end. Late afternoon found them back at the little woods with about half an hour of shooting time remaining. Time for one last pass on the way back to the car. Crisp leaves crackled under the hunter's feet as he approached the bend in the woods. The dogs were out of sight, but he could hear them below him, working the far side of the woods. He was aware of the comfortable bumping of the pheasant in his game pocket and the weariness that had settled into his legs.

### Snow-White Ring

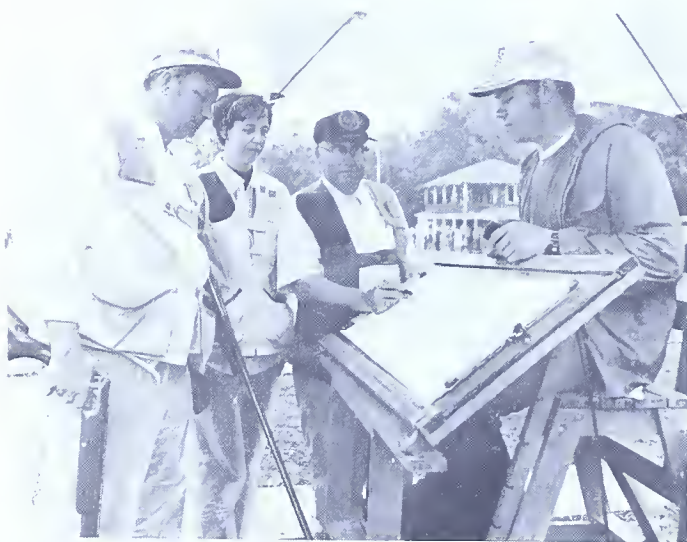
Abruptly, he became aware of something else. The dogs had stopped! Senses alert and gun at the ready, he had only enough time to take two steps before a big ringneck cackled straight up into the air between the dogs and him. In an instant, the gun had found its niche in the hunter's shoulder. The front sight magically picked up that snow-white ring in the split-second that the rooster was stock still, that eye-blink between vertical take off and full-powered flight.

Then, slowly, the hunter lowered his unfired gun and touched the brim of his cap with a forefinger in salute to the big bird as it streaked away into the cotton candy sunset. The two setters looked at him—he thought understandingly—and fell in at heel for the walk to the car. Long shadows danced ahead of them over the frost-blackened clover.

It had been one of the rarest of days, the fitting climax to a most gratifying season. As the hunter's car disappeared down the winding country road, the silence was broken by a lone ringneck who brazenly called out his challenge to the world.



SHOOTERS



DESPITE FREQUENT showers, veteran trap shooters turned in good scores in June. Above, A.T.A. President Andy Long with several competitors.

## Pennsylvania

FOR MANY of the competitors, the Pennsylvania State Shotgun Club near Elysburg is the host of the Annual Tournament was held during which six trophies, and 59 state open titles were won by a total of 1301 gunners, some from Texas, shot this year. The competition, and that number of participants, is expected to increase in the next few years.







ing tickets.



## ate Shoot

ding trapshooters, the Valley Gun & Country of the year. The 81st ne—a five-day compe- hies, 55 state resident were claimed. A total away as Oregon and are currently used in meduled to be doubled

Photos by Joe Osman



**THOUGH MOST SHOOTERS** give little thought to the process, the statistical section—record keeping—is one of the most demanding parts of a shoot. Accuracy is essential.





# FIELD NOTES



## Mother's Love

**BUTLER COUNTY** — A state trooper found a baby sparrow hawk in his yard. The hawk was unable to fly. He put the bird into an old bird cage and unsuccessfully tried to feed the young bird. But he saw the strong force of mother's love when an adult sparrow hawk came in, perched on the cage and forced a mouse through the bars of the cage to the young fledgling hawk. — District Game Protector J. D. Swigart, Butler.



## What Did She Say?

One of our Food and Cover Corps employes recently found his cooperative efforts embarrassing. He picked up a road-killed deer while returning his girlfriend to her residence from a date. A goodnight kiss was abruptly interrupted by an alert Pennsylvania State Policeman interested in enforcing the Game Law concerning the unlawful possession of a deer in close season. The red-faced man proved that he was "only doing his duty."—Conservation Information Assistant R. D. Parlamen, Franklin.

## Conservation Theory

**LACKAWANNA COUNTY**—It has been interesting to watch the conservation movement run through what has been described as "the classic stages of a theory's career." Any theory first is attacked as absurd; then it is admitted to be true, but obvious and insignificant; finally it is seen to be so important that its adversaries claim that they themselves discovered it. Certainly the conservation movement is way beyond the first stage, and more recently has passed through the second. Now, as we find ourselves into the transitional events of the third stage — it is without fear of contradiction that the Pennsylvania Game Commission and its counterparts throughout cannot be identified as proponents of this final phase of the theory's career of acceptance. — District Game Protector T. C. Wylie, Moscow.

## Beyond The Call of Duty

**FRANKLIN COUNTY** — Deputy Hollingshead's wife received a telephone call, complaining about a deer near some houses which had been dead for several days and was creating a very unpleasant odor. Mrs. Hollingshead asked if anyone was there to assist her with the loading of this deer. When she arrived, no one could be found. A passerby stopped and helped her load the deer into the truck, but quickly excused himself because he couldn't take any more of the smell. I understand Mrs. Hollingshead said that was the first and last deer she was ever going to pick up.—District Game Protector R. E. Schmuck, Greencastle.



## Wildlife Management

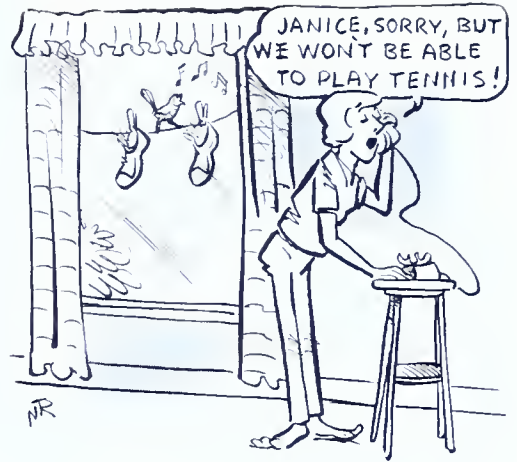
**MONTGOMERY COUNTY**—Those who think applying wildlife management and conservation is as simple as stocking animals, issuing licenses and enforcing game laws should ponder what Aldo Leopold had to say: "We learned that you can't conserve game by itself; to rebuild the game resource you must first rebuild the game range, and this means rebuilding the people who use it, and all the things they use it for. The job we aspired to do with a dozen volunteers is now baffling a hundred professionals. The job we thought would take five years will barely be started in fifty. Our target then is a receding one. The task grows greater year by year, but so does its importance. We gain by seeking a few trees or birds; to get them we must build a new relationship between men and land."—District Game Protector B. J. Schmauder, Collegeville.

## No Time For Fishing

**CLARION COUNTY**—After one week of investigating numerous damage complaints, picking up 5 road-killed deer, serving a warrant, attending a hearing, giving a hunter safety course and presenting two conservation programs, I still am asked very frequently, "What do you guys do in the summer?"—District Game Protector J. G. Bowers, Knox.

## Leave Wildlife Alone!

**LANCASTER COUNTY**—Recently I had a chance to do a radio program, so I spoke about leaving wildlife in the wild and the harm people do by picking up young animals. I emphasized that in most cases these animals are not abandoned and their parents will return for them. The next week people brought in 10 baby rabbits and 21 pheasant chicks. Will people ever learn?—District Game Protector T. L. Fox, Ephrata.



## Home Sweet Home

**HUNTINGDON COUNTY**—With much said about housing for flood victims, I found at least one bird who knows how to improvise. At the home of Mr. and Mrs. Willard Booher near Rockhill, a little wren made her nest in a size 13 tennis shoe which was hanging on the line of the porch of the Booher home. Prior to my going to the Booher home, the wren had hatched an egg, and we discovered a new nest was under construction in the other tennis shoe.—Acting District Game Protector C. E. James, Orbisonia.

## Interested In Wildlife

**LUZERNE COUNTY**—While I was assisting in evacuating a person in the Kingston area during the flood disaster, an elderly couple departed from their boat with a beagle hound and a plastic bag. The man asked me what he should do with the live wild rabbit that he had in the bag. Due to the seriousness of the flood, I asked him if he would release it for me. He said he would be glad to. I believe that we have some dedicated sportsmen in our times; even though this one had to evacuate his home, he was interested in saving wildlife.—District Game Protector E. R. Gdosky, Dallas.



### Groundhog Call

**LEBANON COUNTY**—I guess we can add another type of wildlife call to our list. Ray Miller, Palmyra R. D., was hunting woodchucks for about two hours and did not see any, so returned home. Then he decided to sharpen a saw. He opened the outside cellar door for air and then he started to file the saw. With the associated screech a woodchuck came down the steps to within three steps of him. When Mr. Miller spoke, the chuck departed in a hurry.—District Game Protector P. A. Hilbert, Cleona.

### Traitor

I received a call from the caretaker of a local cemetery in Mifflin County complaining of a raccoon problem. Daily over the Fourth of July, the caretaker erected flags on the graves of deceased soldiers, and each evening a raccoon ripped them from the small masts. — Law Enforcement Assistant J. D. Moyle, McVeytown.

### Pair of Eagles

**LANCASTER COUNTY** — I had the great thrill and pleasure of seeing two bald eagles along the river recently. Others have also seen them. They must have nested somewhere along the river.—District Game Protector J. P. Eicholtz, Strasburg.

### Didn't Get All of Them

Question of the month: What kind of whitetail deer has the biggest rack, runs the fastest, can leap small trees with a single bound, and will be around this year? Answer: The one so many deer hunters missed last year. — Land Manager W. A. McGinness, Claysville.

### Fawn Saved From Flood

**BRADFORD COUNTY** — During the June flood Sergeant Sol Spitulnik of the Towanda Police Department was evacuating the police station as the river rose when he saw something swimming across the river. He went to a better position where he saw that it was a fawn deer. The deer was heading for a parking lot where a crowd had gathered. The sergeant cleared the crowd, waded into the water which was just below his waist, and caught the deer. The fawn was given to Deputy Pelton, who later released it in the wild.—District Game Protector D. C. Beach, Towanda.

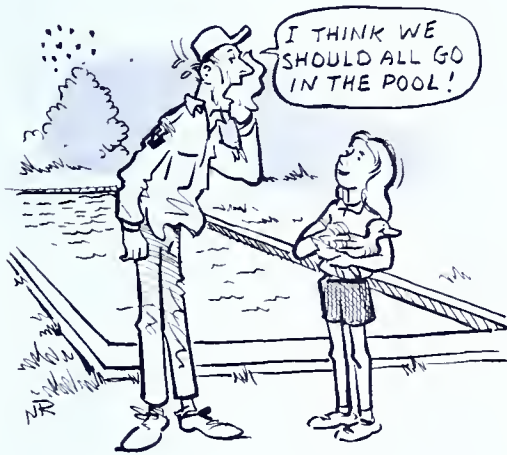
### The Use of Pistols

**MONTGOMERY COUNTY**—While speaking to a Boy Scout group a couple of weeks ago, the conversation got around to pistols. One lad said he knew about pistols, that "They are only used to kill people." When I asked if the group knew about target shooting and hunting with pistols, I got blank stares. I then mentioned that the news media were very careful not to show firearms being used for pleasure. As an example, I talked about the lack of coverage for the shotgun, rifle and pistol events at the Olympic Games. This surprised most of the boys, because they didn't know the Olympics had shooting events. If this is the impression our youth gets from the news media, I'm afraid the hunting and shooting public are in real danger.—District Game Protector H. T. Nolf, Telford.



### Cleaned Up Before Party

**BLAIR COUNTY**—While on night patrol recently, we came upon a group of young people having a party. We stopped and asked them not to litter. One of the young men in the group asked me to shine my light to the side of the road. When I did, I was very pleasantly surprised, for there, very neatly stacked, was all the litter which had accumulated for several months. The gentlemen then informed me that they had spent most of the afternoon cleaning up the area.— District Game Protector H. L. Harshaw, Hollidaysburg.



### The Right Touch

**CUMBERLAND COUNTY** — On one of those 90 degree days, I was called upon to remove a hen mallard duck and her four ducklings from a swimming pool, which they were using for their home. The ducklings were netted easily, but mama wanted no part of me and my net. After about an hour of chasing her around the pool edge, the streets, and nearby yards in the stifling heat, a young girl from nearby walked right up to the duck and caught her in her hands, as I stood by about to collapse from heat prostration.—District Game Protector J. P. Filkosky, Mechanicsburg.



### Plenty of Game

**ERIE COUNTY**—Many calls have been received concerning raccoons acting in a drunken manner. When raccoons become over-populated, Mother Nature strikes them with disease to control their number. Woodchucks are at numbers that are hard to believe, and even the cottontail seems to be holding his own this year. If all continues, this should be a good hunting season. — District Game Protector W. A. Lugaila, Waterford.

### Convinced

**CAMBRIA COUNTY**—Last winter a rabbit trap was set in a yard of a Johnstown resident in order to remove rabbits from the borough. The next morning the trap was set off and a note attached explaining "You can't catch me—Bugs Bunny." This summer the people complained of rabbit damage and now will allow the rabbits to be trapped next winter. — District Game Protector L. D. Mostoller, Johnstown.

### White Fox

**PIKE COUNTY** — Romaine Whitaker of Dingmans Ferry reported that he saw a fox in Lehman Township which was all white with the exception of the tips of the ears and tail, which were black. — District Game Protector D. S. McPeck, Jr., Matamoras.



### Take That!

**BEAVER COUNTY**—Deputy Ralph Young of Rochester trapped a raccoon that was making a nuisance of itself by dumping garbage cans. Deputy Young has a friend who is an avid raccoon hunter and who belongs to one of the dog training areas in the county, so Deputy Young gave him the raccoon to release on the training area. When the raccoon was released, it immediately gave chase to the hunter. The end result was that the hunter was “treed” on the hood of his car for 45 minutes. — District Game Protector G. T. Szilvasi, Midland.

### Take A Vacation

**ARMSTRONG COUNTY** — What causes it? Could it be the lush growth in the woods, or the heat of July? Maybe both. Anyway, during the month of May, Armstrong County had 68 deer hit on the highways. During the month of July I had only 6 in my district. — District Game Protector R. H. Muir, Kittanning.

### Woodcock Hunters Note

Are you a woodcock hunter? The Pennsylvania Game Commission asks sportsmen to assist the Pennsylvania Cooperative Wildlife Research Unit in a state-wide wing collection to gain further information about woodcock in Pennsylvania. If you will be hunting woodcock this fall, send your name and address to the Pennsylvania Cooperative Wildlife Research Unit, 113c Ferguson Building, University Park, Pa. 16802.

### Escape Artist

**BRADFORD COUNTY** — While transporting a trapped raccoon on my deer rack, Deputy Parsell and I were very much surprised to see the raccoon (which had gotten out of the box trap) come sliding down the windshield of the car. Mr. Raccoon had gone up the trunk, across the roof, slid down the windshield and jumped off the front fender after I had slowed down.—District Game Protector W. A. Bower, Troy.

### Ouch!

**WESTMORELAND COUNTY** — Every week I receive calls from people whose children have been bitten or scratched, or who have handled baby raccoons, rabbits, opossums and baby skunks that have wandered into the yard of the home. Please inform the children never to touch any wild animal that wanders into the yard or a stray of any kind. Maybe we should start a campaign—DO NOT TOUCH! —District Game Protector S. E. Lockerman, Pittsburgh.

### Who Do I Call?

**WYOMING COUNTY**—During the gardening season, I receive quite a number of complaints relative to rabbit, woodchuck, raccoon and deer damage. The best deterrent is a woven wire fence with the small mesh close to the lower portion of the fence. I had such a fence on my own garden, but still lost 120 cabbage plants, two 25-foot rows of beets, a half row of beans and the pruning of the carrot tops to rabbits.—District Game Protector A. J. Kriefski, Tunkhannock.





# CONSERVATION NEWS



By Ted Godshall

## Waterfowl Seasons Set

**W**ATERFOWL seasons and bag limits for 1972 have been announced by the Pennsylvania Game Commission within frameworks set up by the U.S. Bureau of Sport Fisheries and Wildlife.

Several important changes from recent years have been made in the waterfowl setup in Pennsylvania.

There will be a split duck season this year, and hunters will not be permitted to take canvasback, redhead ducks or brant.

The opening hour for taking waterfowl on the first day of the season in northwestern Pennsylvania will be 8 a.m.

And finally, hunters will be able to take the full limit of geese in south-central and southeastern Pennsylvania where they were limited to one goose last year.

There will be no open season on snow geese, blue geese or swans.

The initial season for ducks, coots and mergansers will open on Saturday, October 7, and close on Saturday, October 14. The second part of the duck, coot and merganser season will open on Thursday, October 26, and close on Saturday, December 16.

A 70-day goose season will also open on Saturday, October 7, and will run continuously through Friday, December 15.

Overall, bag limits on ducks and geese generally correspond with those of last year.

The daily bag limit for ducks will again be 3, with a possession limit of 6 after the first day. Hunters this year may again take 15 coots daily, with a possession limit of 30. The bag



*PGC Photo by Wes Bower*

limit on mergansers remains at 5 daily and 10 in possession.

Depressed populations of canvasbacks, redheads and brant led to the closed season this year on these important species.

Three geese may be taken per day, except in Crawford County, and the possession limit on Canada geese will be 6 after the first day. In Crawford County, only 1 goose may be taken per day.

Pennsylvania hunters will again have to be careful about the species of waterfowl they shoot.

A gunner may not take more than 2 wood ducks per day, and he may not have more than 2 woodies in his possession at any time after the opening day.

Not more than 1 black duck may be taken daily this year, and a hunter may not have more than 2 of the species in his possession.

Although the daily limit on mergansers is 5 with a possession limit of 10, not more than 1 hooded merganser may be taken daily, and the possession limit on hooded mergansers is 2.

During the regular duck season, hunters may take 2 scaup daily in addition to the regular duck limit, but

only on the waters of Lake Erie and Presque Isle Bay. The possession limit on the extra scaup is 4.

On the opening day of the waterfowl season, Saturday, October 7, it will be unlawful to take any wild migratory waterfowl prior to 8 a.m. in the counties of Butler, Clarion, Crawford, Erie, Forest, Jefferson, Lawrence, Mercer, Venango and Warren.

On the opening day of the regular small game season, Saturday, October 28, it will be unlawful to take any wild birds or wild animals, migratory or otherwise, before 9 a.m. anywhere in Pennsylvania.

Otherwise, hunting hours for waterfowl will be from one-half hour before sunrise until sunset.

## Available Publications

The following publications are available from the Pennsylvania Game Commission, P. O. Box 1567, Harrisburg, Pa. 17120. Prices quoted include taxes, handling and postage.

**GONE FOR THE DAY**, by Ned Smith. All of the outstanding columns and artwork which appeared under this title in **GAME NEWS** during a four-year period. Delightful reading for everyone. 216 pp., \$2.00.

**PENNSYLVANIA TRAPPING AND PREDATOR CONTROL METHODS**, by Paul L. Failor. Everything you need to know to trap any of the state's furbearers. 116 pp., 50 cents.

**THE WHITE-TAILED DEER IN PENNSYLVANIA**, by Stanley E. Forbes. Detailed information on all phases of the whitetail's life. 40 pp., 50 cents.

**PENNSYLVANIA BIRDLIFE**, by Leo A. Luttringer. Fascinating data on all the birds normally seen in the Commonwealth, 128 pp., \$1.00.

**BIRD AND MAMMAL CHARTS**, by Ned Smith. Set 1 (20" x 30") \$2.00. Winter birds, marsh and water birds, waterfowl, birds of prey. Set 2 (20" x 30") \$2.00. Mammals of farm and woodlot, mammals of the mountains, birds of the forest, birds of field and garden. Set 3 (11" x 14") \$2.25. All eight charts listed in Set 1 and Set 2. Individual charts not sold in either size.



## OTHER MIGRATORY GAME BIRDS UNDER FEDERAL AND STATE REGULATIONS

Species	Open Seasons First Day	Last Day	Daily Bag Limits	Maximum Possession Limits	Shooting Hours
DOVES	Sept. 1	Nov. 9	12	24	12 o'clock noon, prevailing time to sunset.
†RAILS (Sora and Virginia)	Sept. 1	Nov. 9	25††	25††	One-half hour before sunrise to sunset (except on October 28 when the opening hour will be 9 a.m.).
GALLINULES	Sept. 1	Nov. 9	15	30	
WILSON'S or JACKSNIPES	Oct. 14	Dec. 16	8	16	
WOODCOCK	Oct. 14	Dec. 16	5	10	
†NO OPEN SEASON on other species of rails, ††Singly or in the aggregate of species.					
DUCKS	Oct. 7	Oct. 14	3°	6°	One-half hour before sunrise to sunset. EXCEPTIONS:
COOTS	Oct. 26	Dec. 16			1. Opening hour on October 7 will be 8 a.m. in the counties of Butler, Clarion, Crawford, Erie, Forest, Jefferson, Lawrence, Mercer, Venango and Warren.
	Oct. 7	Oct. 14	15	30	
	Oct. 26	Dec. 16			2. Opening hour on October 28 will be 9 a.m. statewide.
MERGANSERS	Oct. 7	Oct. 14	5°°	10°°	3. Controlled Shooting Sections of Pymatuning Waterfowl Area: 8 a.m. until 12 noon on October 7; 9 a.m. until 12 noon on October 28; on other shooting days: one-half hour before sunrise to 12 noon (prevailing time) on Mondays, Wednesdays, Fridays and Saturdays beginning October 9.
	Oct. 26	Dec. 16			
GEESE	Oct. 7	Dec. 15	3°°°	6	
EXCEPTIONS: * Daily bag limit of 3 ducks may not include more than: 1 black duck, 2 wood ducks. ** Not more than 1 hooded merganser daily, or 2 in possession. *** Daily bag limit of 1 goose in Crawford County. Extra scap: restricted to waters of Lake Erie and Presque Isle Bay October 7 - October 14 and October 26 - December 16, daily bag limit of 2 and possession limit of 4 in addition to above duck daily bag and possession limits.					

ON THE OPENING DAY OF SMALL GAME SEASON, SATURDAY, OCTOBER 28, 1972, IT IS UNLAWFUL TO HUNT ANY WILD BIRD OR ANIMAL, INCLUDING MIGRATORY GAME, ANYWHERE IN PENNSYLVANIA PRIOR TO 9 A.M.

(NO OPEN SEASON — CANVASBACK AND REDHEAD DUCKS, BRANT, BLUE GEESE, SNOW GEESE, SWANS. NO SUNDAY HUNTING.)

MIGRATORY BIRD HUNTING METHODS—Permitted: dogs; artificial decoys; longbow and arrow; shotgun not larger than 10 gauge and incapable of holding more than 3 shells; bird calls except recorded or electrically amplified calls or sounds or recorded or electrically amplified imitations of bird calls or sounds; blinds; floating craft (except sinkbox) including those propelled by motor, sail and wind, or both, when the motor of the craft has been completely shut off and/or the sails furled, as the case may be, its progress therefrom has ceased, and it is drifting, beached, moored, resting at anchor or is being propelled by paddle, oars or pole, or if the craft is used solely as a means of picking up dead or injured birds. Prohibited: Trap, snare, net, crossbow, rifle, pistol, swivel gun or machinegun; shotguns capable of holding more than three shells unless gun is plugged to 3-shot capacity so that plug cannot be removed without disassembling gun; sinkbox, motor-driven conveyance, motor vehicle or aircraft; shooting from motorboat or craft under power; livestock used as a blind or means of concealment; live decoys; recorded or electrically amplified bird calls or sounds or imitations thereof; motor-driven land, water or air conveyance or sailboat used for the purpose of or resulting in concentrating, driving, rallying or stirring up migratory birds or waterfowl; salt or bait. No person may possess or transport more than the daily bag limit or aggregate daily bag limit, whichever applies, of migratory game birds, tagged or not tagged, at or between place where taken and either (1) his automobile or principal means of land transportation; or (2) his personal abode or temporary or transient place of lodging; or (3) a commercial preservation facility; or (4) post office or common carrier facility, whichever one he arrives at first.

FEDERAL STAMP FOR MIGRATORY BIRD HUNTING—No person who has attained the age of 16 years shall take any migratory waterfowl (ducks, coots, mergansers, geese) unless at the time of such taking he has on his person an unexpired Federal Migratory Bird Hunting Stamp (duck stamp), validated by his signature written across the face of the stamp in ink. A person who has not reached his 16th birthday does not have to have a stamp. This stamp is not required to hunt doves, rails, gallinules, woodcock, or Wilson's or Jacksnipe. Federal Migratory Bird Stamp available at U. S. Post Offices.

NOTE: One fully feathered wing or the head must remain attached to each migratory bird (except doves) while being transported.

# Triple Trophy Awards Earned By 96 Hunters



**TRIPLE TROPHY WINNER Domer F. Wiltout, of Scottsdale, receives his award and shoulder patch from DGP Alex Ziros during a sportsmen's banquet at Connellsville.**

**T**HE PENNSYLVANIA Game Commission's coveted Triple Trophy Award was presented to 96 hunters during the 1971-72 seasons, according to Information and Education Chief Roy W. Trexler.

The Triple Trophy Award has been available to hunters who took an antlered whitetail deer, a black bear and a wild turkey during the same hunting license year.

This award was created in 1966, and during the five years in which it was available, 346 presentations were made. Those who qualified during the past year will be the last to receive the award, since the program has been discontinued.

No Triple Trophy Awards were presented during the 1970-71 year because there was no open season on bears.

During the past year, six hunters qualified for the award for the second time. Only eleven hunters earned the

trophy twice in the five years of its existence. There were ten non-residents who won last year, making a total of thirteen out-of-staters who qualified during the five years. Only one woman ever won the award.

The following are the winners of the Triple Trophy Award for the 1971-72 hunting seasons:

Addeo, Francis M. — 334 N. Broad St., Ridgway, Pa.

Barnett, Paul W., Sr. — 260 S. Broad St., Canfield, Ohio

Barnhart, William C. — Warfordsburg, Pa.

Beane, Ronald — 1907 Lincoln St., Camp Hill, Pa.

Beard, Walter — Box 33, Osceola, Pa.

Bedenik, Paul T. — 46 Booker St., Campbell, Ohio

Bloom, Edward D. — 415 Susquehanna Ave., Curwensville, Pa.

Bottorf, T. E. — R. D. 2, Mill Hall, Pa. (1966 winner)

Brown, Harold L. — R. D. 1, Liberty, Pa.

Brown, Richard D. — 503 Graffius Ave., Punxsutawney, Pa.

Brownawell, Ronald C. — R. D. 1, Shermans Dale, Pa.

Buccini, Ernest O. — 145 Oregon St., Louisville, Ohio

Carlson, William S. — 222 Shaffer Ave., DuBois, Pa. (1966 winner)

Claycomb, Alvie B. — R. D. 1, Bedford, Pa.

Conklin, Marshall — R. D. 2, Ridge Rd., Horseheads, New York

Corle, Vernon — Box 91, Queen, Pa.

Covalt, Neil E. — Needmore, Pa.

Daye, Neil H. — R. D. 1, Bellefonte, Pa.

Delling, John W. — Blooming Grove, Hawley, Pa.

Deppen, Lindsay — S. Pine St., Pillow, Pa.

Dickson, Frank E. — R. D. 4, Box 52, Tyrone, Pa.

Dippold, Bruce A. — Windfall Road, St. Marys, Pa.

Dixon, Freeman — R. D. 2, Wysox, Pa.

Dominick, Dennis L. — R. D. 4, Box 66, Greensburg, Pa.

Douthit, Max — 969 South Ave., Bradford, Pa.

Dove, William R. — 203 Hill St., Warren, Pa.

Dreihaupt, Ray O. — 625 W. Washington St., Bradford, Pa.

Fleming, Billy L. — R. D. 4, Greencastle, Pa.

Fletcher, John A. — R. D. 1, Irwin, Pa.



Frankhouser, Maurice B. — R. D. 1, Box 54B, Reedsville, Pa.  
 Frantz, Harold E. — R. D. 1, Port Matilda, Pa.  
 Freeman, Charles R. — R. D. 1, Mt. Pleasant, Pa.  
 Goss, Francis D. — R. D. 2, Box 108-A, McVeytown, Pa.  
 Hardy, Richard — 1306 Broadway, E. McKeesport, Pa.  
 Hartwick, Paul M. — 7485 Furnace Br. Rd., Glen Burnie, Md.  
 Hopkins, Leroy J. — 139 S. Main St., Hughesville, Pa.  
 Hoover, Warren R., Jr. — 38 W. Granada Ave., Hershey, Pa. (1967 winner)  
 Ianaro, John L. — 486 E. Tenth St., Clearfield, Pa.  
 Jarrett, Michael C. — R. D. 1, Montgomery, Pa.  
 Jeffrey, Robert B., Dr. — 2401 Norwood Ave., Easton, Pa.  
 Jones, Terry D. — 60 N. Raccoon Rd., Youngstown, Ohio  
 Klemick, Joseph M. — 30 N. Shamokin St., Shamokin, Pa.  
 Kolivoski, James L. — Karthaus, Pa.  
 Krasinski, George — R. D. 1, Box 233, Morrisdale, Pa.  
 Kump, Paul E. — R. D. 6, Gettysburg, Pa.  
 Kunselman, James F. — R. D. 3, Box 328A, Apollo, Pa.  
 Laughlin, Donald M. — R. D. 3, Box 444, Blairsville, Pa.  
 Lentz, Joseph — Box 14, Acme, Pa.  
 Lewis, Carroll — 16 Cliff St., Montrose, Pa.  
 Maloney, Ronald J. — R. D. 1, Meadville, Pa.  
 Mansfield, George E. — R. D., Ashville, Pa.  
 McCarl, John H. — R. D. 1, Guys Mills, Pa.  
 Miller, Milo M. — 14410 Hayes Rd., Middlefield, Ohio  
 Nice, George F. — 286 Chestnut St., Kingston, Pa.  
 Palmatier, David K. — R. D. 1, Wells-ville, New York  
 Pifer, Theodore Lee — R. D. 1, Box 1049A, Clarendon, Pa.  
 Pisarchick, Anthony, Jr. — 957 Third Ave., Brockway, Pa.  
 Proesl, John — 151 Rightmeyer St., St. Marys, Pa.  
 Reed, William R. — 1448 W. Main St., Valley View, Pa.

Regi, Gerald D. — Fort Littleton, Pa.  
 Rhoads, Lloyd A. — Box 129, Laughlin-  
 town, Pa.  
 Rice, Walter L. — Margaret Ave., Evans  
 City, Pa.  
 Rohrer, Roger M. — R. D. 1, Paradise,  
 Pa.  
 Rosell, Leonard J. — 124 W. Seventh St.,  
 Hazleton, Pa.  
 Roulo, Joseph — Star Route, Lewis Run,  
 Pa.  
 Rubis, David N. — R. D. 1, Box 67,  
 Dawson, Pa.  
 Russell, Lee F. — 109 Mann Ave., Mill  
 Hall, Pa.  
 Schleiden, Russell E. — Penn's Cave,  
 Centre Hall, Pa.  
 Schwartz, Larry E. — R. D. 1, Spencer-  
 ville, Ohio  
 Scrimshaw, Wayne P. — Box 86, Sinna-  
 mahoning, Pa. (1968 winner)  
 Sherk, Stephen L. — 1297 E. Main St.,  
 Bradford, Pa.  
 Sinn, Leroy A. — R. D. 1, Newton Falls,  
 Ohio  
 Skalicky, Thomas — 216 Alter Dr., Pitts-  
 burgh, Pa.  
 Snyder, Simon — R. D. 1, Milford, Pa.  
 Sokoloski, Bart J. — 186 First St., West-  
 field, Pa.  
 Stanton, John L. — R. D. 1, Port Matilda,  
 Pa.  
 Stum, D. Louis — Greencastle, Pa.  
 Swanson, Paul F. — 1215 Chestnut St.,  
 Franklin, Pa.  
 Swisher, Boyce A. — R. D. 1, P. O. Box  
 81, Tunkhannock, Pa.  
 Taylor, Charles D. — R. D. 1, Smethport,  
 Pa.  
 Tilson, Gregory W. — 25 W. Vandevend-  
 er St., Mount Union, Pa.  
 Uberti, Donald — Box 15, Penfield, Pa.  
 Ulmer, Elmer L. — 4 Hesbon Rd., Wil-  
 liamsport, Pa.  
 Vaughn, Donald W. — R. D. 2, Conneaut  
 Lake, Pa.  
 Walk, Kenneth R. — R. D. 3, Box 251,  
 Tyrone, Pa.  
 Weaver, Arnold E. — R. D. 1, Knox, Pa.  
 Weber, Wallace — R. D. 1, Grampian, Pa.  
 Weist, Frederick F. — Tryon St., Hones-  
 dale, Pa.  
 White, Raymond — R. D. 2, Kittanning,  
 Pa. (1968 winner)  
 Williamee, Irwin L. — R. D. 2, Wells-  
 boro, Pa.  
 Wiltrout, Domer F. — Star Route, Box  
 103-A, Scottdale, Pa.  
 Windemaker, Earl — 257 Petersburg Rd.,  
 Carlisle, Pa.  
 Winter, Joseph F. — R. D. 3, Williams-  
 port, Pa.  
 Yezek, Stanley A. — 421 Vine St., South  
 Connellsville, Pa.  
 Young, Edward — R. D. 2, Butler, Pa.  
 Zimmctt, Alvin — 487 N. Michael St.,  
 St. Marys, Pa. (1968 winner)

**Give Game News  
to a friend**

# Principles of Wildlife Management

By Donald E. Zimmerman

PGC Wildlife Conservation Education Specialist



**HABITAT MANAGEMENT** and the enforcement of our game laws have proved to be the most important aspects in producing annual crops of wildlife.

**I**N OUR EARLIER columns we pointed out some of the problems facing hunting and wildlife management and then reviewed a few contributions hunters have made to wildlife and natural resources management. Now it's time to discuss selected principles of wildlife management and give some background on them.

Traditionally, game management is defined as the art and science of making the land produce a sustained annual crop of wildlife for recreational use. In a broad sense, this is the philosophy of game management.

Though laws, habitat management, refuges, predator control and stocking were used during the development of wildlife management, today the primary emphasis is on laws and habitat management, with refuges, stocking

and predator control being of less importance.

An understanding of some of the controls and fundamentals of ecology is essential to understanding the "whys" behind game management. For our purposes here, ecology is the study of the relationships of the plant and animal populations to each other and to their environment. A wildlife manager may investigate biological, physical or chemical factors in these areas in order to understand wildlife populations and learn how they can be managed efficiently.

Many people have difficulty understanding the population concept. In part, this is the result of our education and background. We have been individually orientated and look at the world from a single viewpoint—ours. We're self-centered. Such a viewpoint makes it difficult to consider wildlife, or for that matter human beings, from a population concept.

As wildlife managers, we often hear comments such as, "It's poor management for a deer to be killed on the highway," or, "That fox killed a hen pheasant which would have produced eight birds by fall." Such comments reflect an individualistic viewpoint.

The deaths of individuals are not disregarded by wildlife managers; they are taken into account in the management of a species population.

Because of wildlife's breeding potential, it must be viewed as a renewable resource. Under a sound management program, a portion of the population may be taken without harm to a species.

The fact of the matter is that animal populations undergo dramatic changes through the year, and from year to year. The birth-growth-reproduction-death sequence happens to all



living organisms, whether plants or animals, and from the smallest and simplest to the large, complex species such as man.

Most humans are close to only one stage of life, and thus fail to see the total picture. In effect, they have tunnel vision.

In our society, the sportsman is probably more aware of the life sequence than many of our "informed citizens," especially when compared to those who on the basis of emotion oppose hunting, trapping and other consumptive sports. Many sportsmen are outdoors through the seasons and, being close to nature, they develop a respect and understanding for life and wildlife than can be gained in no other way.

They know from first-hand experience the life sequence. In spring and summer, a new generation is born, followed by growth and development of the individuals through the summer and fall. But life is short for wildlife and death takes its toll in many ways. Some animals are born dead while others die from a variety of causes—accidents, disease, predation, starvation, etc. Only those best adapted and most suited to cope with their environment live to breed and produce another generation.

Animal populations have an inherent characteristic called a biotic potential: opposing this is what might be termed a characteristic of the habitat.

Simply, biotic potential means "life possibility." The biotic potential of a species depends upon: (1) the number of young hatched or born, (2) the number of broods or litters produced a year, (3) the reproductive age or age of sexual maturity, (4) the sex ratio of the species, and (5) the ability of the species to survive under given physical conditions.

Opposing the biotic potential are such environmental resistance factors as: (1) predators, parasites, diseases, and accidents, (2) competition for food, mates and cover, (3) weather,

(4) cover and shelter, (5) food and water, (6) soil fertility and water supplies, and (7) man's activities.

We could call the biotic potential the positive factor in a wildlife population and the overall environmental resistance the negative factor. Subtracting the environmental resistance from the biotic potential gives the population. However, unless checked by environmental resistance, the biotic potential of a species can result in a population explosion which has highly undesirable effects.

### Relationships Stressed

In defining ecology, we stressed the relationships of the plant and animal populations, the physical and the chemical factors. As we study the biotic potential-environmental resistance relationship this becomes readily apparent. Plant communities influence the animal populations that will be found on an area, and the animal populations influence the plant community.

This can be illustrated with deer. The maximum deer population in an area usually occurs some five to 20 years following a clear cutting of a forest tract.

Deer have a definite impact on woodland. Near the rifle range at the Game Commission's Training School is a deer-proof area approximately 50 by 50 feet. A high fence was erected five to 10 years ago after a border cutting. Inside the fenced area, the trees are 15 to 20 feet high; outside the fence there has been little regrowth. Regrowth here has been prevented by deer browsing any seedlings and sprout growth.

These then are some of the basics of wildlife management and ecology. There are, however, many others that we'll be reviewing in later columns.

### SUGGESTED READING

Madson, J. and E. Kozioky, 1972. Principles of Game Management, Conservation Department. Olin Mathieson Chemical Corporation, East Alton, Illinois. 25 pp.

## Days of Yore



**AFTER THEIR CABIN WAS** destroyed by fire in 1911, the Cassville Hunting Club used this tent camp for several years. In 1912, they took ten bucks. Front row: Ira Corbin, Chester Stever, Dave Stever, Elby Stever, Charles Corbin. Back row: Huston Prough, Joe Horton, Frank Stever, "Humpy" Hoover, unknown, Morris Parks, Charles Huffman, Emory Corbin, Bill McCorkle, John Horton. Most of these hunters were from the Cassville and Trough Creek areas.

PGC Executive Director Glenn Bowers receives engraved silver cup from Clayton Shenk of the State Archery Assoc. for his many important contributions to conservation and archery.

M. EARL HESS, of Blairsville, shows some of his whitetail trophies taken in Indiana County. At the age of 74, Mr. Hess still enjoys getting into the deer woods in December.





# 25-Year Club

*Pennsylvania Game Commission personnel have compiled an enviable record among public and conservation agencies for longevity of service. Few organizations in any area of endeavor can boast so many dedicated employees. The most recent PGC employees to complete 25 years of service are shown below.*



**Gene Nelson**  
*Superintendent  
Wild Turkey Farm*



**G. Russell Enlow**  
*Superintendent  
Western Game Farm*

## One-Day Bear Season in 1972

Pennsylvania will have a one-day bear season this year on Monday, November 20. At the June meeting of the Game Commission a two-day season had tentatively been scheduled, but final decision was delayed until additional data on bears could be gathered during the past summer. This information indicated a one-day season would be advisable. Because of this decision, the northcentral part of the state will be open to turkey hunting on Tuesday, November 21. Had there been a two-day bear season, this area would have been closed to turkey hunting both days.

### Sample GAME NEWS Copies

*Do you have a friend who is interested in Pennsylvania's outdoors but is not a GAME NEWS subscriber? Perhaps he'd like to see a copy. Send us his name and address and we'll be glad to mail him a free copy of a recent issue of the magazine. Hopefully, we'll get some new subscribers—and maybe your buddy will stop "borrowing" your copies!*



**IF YOU'RE GONNA HAVE** a duck dinner, the first thing to do is get some ducks! This fellow has the makings.

Good Game . . .

## Recipes from Readers

By Les Rountree

**M**Y PLEA last year for some favorite recipes from the great game cooks who live in Pennsylvania did not go unheeded. I had two selfish reasons in mind when I asked for your secret methods. 1. It was a sneaky way to acquire a lot of fine formulas for preparing wild game. 2. It would provide an ample amount of material for a GAME NEWS column. So without further embellishment, here is a list of recipes I have tried and found excellent.

In my recipe rambling last year I inadvertently omitted the cottontail rabbit. This was a serious oversight, as the rabbit is one of the most readily available game animals across our commonwealth. This recipe sent in by

Mrs. Herbert Meyer of Muncy is so good that it should be eaten on one knee with head bowed. In fact, I suggest that GAME NEWS readers keep it to themselves . . . it's too good for outsiders.

### Rabbit

Dredge 1 (or 2) cut-up rabbits in flour seasoned with salt and pepper.

Fry pieces in  $\frac{1}{2}$  cup cooking oil, 2 tbs. butter, 1 tbs. rosemary leaves, 1 pressed garlic clove. Rabbit pieces should be brown on all sides.

Add  $\frac{1}{2}$  cup dry white wine,  $\frac{1}{2}$  cup beef broth (or bouillon cube with water), 1 tsp. white vinegar.

Cover and bake in 350-degree oven for one hour. Serve over buttered noodles. The wine and broth sauce makes an excellent gravy.



My guess is that this rabbit recipe would also be good with cut pieces of squirrel. Young squirrels can be delicious when simply panfried but the older ones can take a bit more tenderizing. This method should work well.

From Wampum, Pa., Mrs. Pauline Y. Tomon sends me another foil method for cooking a venison roast. This is a really easy one and it's so good that I used it more than once during the past year.

### Venison Roast

Rip off a large piece of heavy duty aluminum foil. Plop venison roast on it. Pour over the roast: one can condensed cream of mushroom soup and one envelope of dry onion soup mix. Fold foil carefully around roast using drugstore wrap so no juice will escape. Roast in a 350-degree oven.

Mrs. Tomon said that her family likes meat well done so she usually roasts a four- or five-pounder about four hours. We're a bit on the cannibal side and like our meat less well done, so I cut the roasting time in half and it was just right. You can open up the foil on top and test, if you must, to insure the proper amount of doneness . . . but be careful not to let the liquid escape.

The loudest complaint that is usually leveled at venison is that it is too dry. This roasting method solves that problem and it really is delicious. Use the liquid in the foil as a gravy to be served over potatoes and the sliced roast.

### Grouse

Grouse is not just good . . . it's great! And especially when fixed to the tune of the fine recipe that I re-

ceived from Bob and Doris Dewey of Coudersport. It goes like this:

Coat grouse pieces with seasoned (salt & pepper) flour. Brown in cooking oil and place pieces in a shallow casserole.

Saute  $\frac{1}{4}$  pound fresh mushrooms (or one can) in the oil. Add to the pan 2 cups of cream, 1 tsp. lemon juice,  $\frac{1}{2}$  tsp. grated lemon rind, 2 tbs. medium sherry. Heat to just below the boiling point and pour over grouse. Cover casserole and bake in 350-degree oven about 35 minutes.

Note: You may wish to add some garlic powder to the seasoned flour for a little extra flavor.

This baked grouse creation could also be used with pheasants and the result would be equally good. It is guaranteed to make the non-game eating neighbor a frequent visitor at your house.

### Pheasant

Using a basic recipe that I found in our local newspaper and changing it a bit, I invented one that I call Minnesota Pheasant. That state's name is added because of the inclusion of wild rice in the preparation. To my knowledge we don't have any wild rice in Pennsylvania. I wish we did.

In a large casserole, soak for four hours 1 cup wild rice, 1 can cream of mushroom soup, 1 can cream of celery soup, 1 envelope dry onion soup mix, 10 ounces white wine (dry). Stir several times while soaking.

Cover pheasant pieces with seasoned flour and brown in butter. Place the pieces on the rice mixture. Cover and bake in a 350-degree oven for 1 hour. Stir rice, turn pheasant and bake another 30 minutes.

This pheasant recipe could also be used with rabbits and grouse with little danger of diminishing the effect.

### Ducks

Wild ducks are truly in a flavor class by themselves. Mallards, blacks, wood ducks and pintails are my favorites. Properly prepared, they are the richest tasting wild meat of all. In all wild duck cooking the big secret is to stop cooking at the precise moment. Overcooked duck or goose is tough and flat and no amount of additives or gravies will resurrect it. Here is a recipe out of the "Field & Stream





**MRS. HERBERT G. MEYER'S** recipe for rabbit looks like this when done—and tastes absolutely delicious.



**ANOTHER GROUSE** recipe was submitted by Doris and Bob Dewey. Shown above in final form, it was great.



**ROUNTREE'S "Minnesota Pheasant"** calls for pheasants in pieces, and a large French chef's knife is handy for cutting. Below, grouse pieces being marinated in oil and steak sauce before broiling according to Mrs. William Larson's recipe. Rountree family "ate it up!"





Guide to Sportsman's Cooking" that is a real dandy.

Saute in olive oil for 10 minutes 2 chopped carrots, 2 stalks of celery (chopped), 1 dozen chopped ripe olives, 1 chopped onion.

Place mixture in the bottom of a shallow roasting pan. Add two room temperature ducks after brushing them with olive oil.

Combine  $\frac{1}{2}$  cup of port wine,  $\frac{1}{2}$  cup chicken stock (or a bouillon cube with water). Heat until almost boiling and pour over the ducks. Add salt and pepper.

Roast (covered) in a 425-degree oven for 35 minutes. Place ducks on a bed of hot rice and keep in a warm oven while you make the sauce.

Sauce: Strain pan juices. Add 2 tbs. corn starch to  $\frac{1}{2}$  cup of ripe olive juice (more or less) and thicken pan juices. Put a little of the sauce on the rice and ducks and serve the rest in a gravy boat.

### Broiling

For some reason or other Americans are great fryers, stewers and roasters. We did not come by this naturally, as our ancestors did a lot of broiling over hardwood fires using nothing more than a sharp stick to warm up their venison cutlets or partridge breast. For certain dishes nothing in the world will beat a cast iron skillet or a dutch oven, but don't knock broiled game until you try it in your oven range or grilled over an open fire.

Here are three recipes that utilize the broiler and the first one is better than I thought it would be. As with wild ducks, the secret to broiling anything is not to overcook it.

From Mrs. William H. Larson, of Duke Center, a very different method of broiling grouse . . . a pungent taste with the meat full of juice:

Marinate pieces of grouse for about 3 hours in 1 small bottle of steak sauce (Mrs. L. uses A1 Sauce), 4 tbs. cooking oil. Turn the grouse occasionally during the marinating.

Place pieces on a broiler pan, 4 inches from heat, and broil 5 to 7 minutes on each side. Total cooking time is 10 to 14 minutes.

Mrs. Larson suggests serving the warmed marinade in little cups to dip the bites of meat in at the table.

Here is a woodcock recipe I found in a newspaper, "The Maine Sportsman":

Allow one woodcock per serving. Salt, pepper and grease (with butter) each bird. Wrap each in a bacon slice (hickory smoked bacon is best). Place on a boiler pan 4 inches from heat and broil 8 minutes on a side. Total cooking time is 16 minutes. Serve immediately on a heated platter.

My wife came up with this way of preparing pheasant breasts:

Marinate the breasts for four hours in  $\frac{1}{2}$  cup cooking oil,  $\frac{1}{4}$  cup red wine (dry), 1 tsp. steak sauce,  $\frac{1}{4}$  tsp. garlic salt,  $\frac{1}{4}$  tsp. fresh ground pepper.

Turn often in marinade. Wipe dry, rub with butter and broil a total of 15 minutes, 5 minutes on each side and 5 minutes straight up. The meat is pink, juicy and absolutely delicious.

### Leftovers

Practically always in cleaning or cooking game we have some tough, odd pieces that remain on the platter. The necks, wings, legs and, at times, the giblets. These pieces, when cooked, are carefully saved in a plastic jar that I keep in a corner of the freezer. I also have another container in there to toss the fresh hearts, livers and gizzards into.

When the time is right for a game stew, the giblets are simmered in a quart of water into which I've tossed a couple of bouillon cubes. The cooked leftovers are added (cutting the meat from the bone) and simmered until tender. The greatest stock imaginable is now available for a vegetable and game meat stew. At this point you can add the slightly shot-up rabbit—the one that Harry and Fred *both* hit and then donated to you!—the grouse legs that are a bit chewy when eaten alone, the pheasant backs and the forelegs of the squirrel. If you happen to have an odd duck part or two around, toss that in too. The whole terribly secret thing about a good game stew is that it's got to have a number of cross flavors blended in to make it interesting. I have never eaten a bad combination game stew! There isn't a way in the world that one could be ruined.

In case you're stuck for a basic stew recipe, remember the Famous Roun-

tree Stew that was first mentioned in this column a couple of years back? There was another excellent recipe in the February 1972 camping column called "Wild Game Stew."

Speaking of things past, do you recall the book I told you about when I was talking about Dutch ovens? It's called *Old-Fashioned Dutch Oven Cookbook* (Caxton Printers, Ltd., Caldwell, Idaho, \$3.95). Well, I finally got around to making some of their sourdough biscuits. Not bad . . . but not too good yet, either. Had some other great sourdough starter that I got from a friend that was a perfect complement to practically all game recipes. Trouble was, when I tried to track down the ingredients I discovered that the friend got it from a friend who, in turn, got it from another friend, and so on. Anyway, I'm working on my own sourdough concoction that will hopefully be reported on in these pages . . . if all goes well with the family taste testers. If you readers have more game recipes you want to share, I just may let you write *next* October's column too.

One final thought about eating wild game. And that, of course, is the final act of the hunt . . . to utilize what

you have gathered. Clean the game promptly and neatly and present to the cook in an orderly condition. When delivered to the kitchen, wild meat does not have to be bloody, hairy or feathery. It is tasty, outstandingly nutritious meat that has not had the "benefit" of extra enzymes, vitamins and other chemical supplements that the supermarket chickens and feed-lot cattle have enjoyed. The exercise that the hunter receives while hunting and the top quality meat the successful hunt provides are dual pleasures that I would like to enjoy for a long time to come.

I didn't mean to philosophize this month but there are some well meaning but slightly misinformed citizens who think that those who kill and eat game birds and animals are horrible barbarians. In a state where motorists kill as much game as the legitimate hunter does, who is the barbarian? If sitting down to a meal consisting of a brace of delicately broiled grouse breasts, or a beautifully glazed rack of venison chops garnished with fresh bib lettuce and served with a good bottle of California red wine is barbaric . . . then call me Attila the Hun!

## *Books in Brief . . .*

(Order from publisher, not from Game Commission)

**Makens' Guide to U. S. Canoe Trails**, by James C. Makens. Le Voyageur Publishing Co., 1319 Wentwood Dr., Irving, Texas 75061, 1972, 86 pp., \$4.95. Lists nearly 900 canoe trails; gives brief description of each, with access points, distances, dangers, portages, etc. Every state but Hawaii represented.

**Outdoor Tips**, compiled by L. W. "Bill" Johnson, Robert Elman and Jerry Gibbs. Remington Sportsman's Library, Box 731, Bridgeport, Conn. 06601. 190 pp., paperbound, \$2.95. Hundreds of useful items on all phases of the outdoors—hunting, camping, fishing, cooking, hiking, conservation, etc.—assembled from experts in all fields.

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## **Keeps Him Busy**

The bull moose attains a maximum weight of approximately 1400 pounds, but he has to eat from 40 to 60 pounds of food daily to do it.



# Powers of Penetration

By Keith C. Schuyler

Photos from the Author



FRED PADEN lightly strokes file across arrowhead's edge to prepare for hunting. "Broadhead Sharpener" holds arrow in proper position for sharpening.

AN EXAMPLE of an arrow gone astray in an accompanying photo this month has a much more important story behind it than a simple miss. It is an actual, on-the-scene picture of an arrow that missed a deer and ended up in a stick. I don't even remember who the hapless owner of the arrow was, but I know why I took the photo.

The dry stick was lying loose on the ground. Yet the arrow sliced its way into the hard wood. It didn't kick it aside; it didn't even move the stick. It *cut* its way until the forward inertia of the head and shaft was absorbed in the job for which it was designed.

This may not be too impressive to the gunner, who knows he could shoot through the stick with a 22-caliber bullet. But, therein lies the difference between the two hunting projectiles—a difference the bow hunter should keep constantly in mind.

A long rifle 22-caliber hollow-point

cartridge, bullet and all, weighs only 50 grains. Roughly 80 percent of this weight (actually 37 grains in the Winchester chart) is the bullet itself. The bullet reportedly leaves the rifle muzzle at 1365 feet per second, and it is still zinging along at 1040 fps at 100 yards, far beyond the effective range of the best bow hunter around.

## Consider the Arrow

Now consider the arrow. A typical aluminum shaft of 28½ inches, with feather fletching and plastic nock, plus adapter insert, weighs just under 400 grains. Add a Bear broadhead with insert of 160 grains, and you have a projectile weighing just about 560 grains—slightly over 15 times the weight of the 22 bullet above. And the *whole thing* must go to the target. Out of a 50-pound bow this feathered



**POWER OF BROADHEAD** penetration is illustrated by this errant arrow which missed a deer and hit this dry, tough stick. Archer must keep this in mind.

projectile will lumber along at perhaps 140 feet per second—less than one-seventh as fast as the 22 at 100 yards. At 100 yards, if the bow hunter is foolish enough to shoot that distance with a hunting arrow, the projectile has a trajectory somewhat similar to that of a rock.

I've used a 22 for comparison since this cartridge is most familiar to the average hunter. A closer comparison, weight-wise, would be the soft point 458 Winchester Magnum with a bullet weight of 510 grains. Even this boxcar bullet is shoving the air aside at 1840 feet per second at 100 yards. It has a mid-range trajectory of only 1.1 inches at that distance. A rough mid-range guess on our arrow at this same distance would be something in the neighborhood of 20 feet.

These "comparisons" are made only to prove that there is *no logical* comparison between a bullet and an arrow. Nevertheless, each is a most efficient projectile for the purpose intended if properly utilized. (I could

go on to explain what the proper utilization of a bullet is and probably end up with a nasty letter from our gun editor, so let's get back to the arrow in the stick pictured here.)

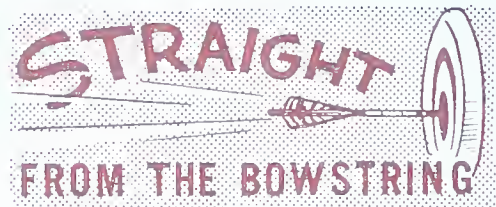
Unlike the bullet, the arrow head must cut its way into the target to do the job for which it was designed. Absent is the tremendous speed and shocking power of an explosion-propelled projectile which depends to a considerable extent upon these factors as well as actual damage to tissue and bone to effect the demise of the quarry sought. Instead, an arrow must create a sufficient wound to cause death within as few seconds as possible after the hit is made.

This is only possible if the arrow head is almost razor sharp!

Note use of the word "almost." There may be some flak on this from those who use heads which employ an actual razor blade or who solder single-edged razor blades to conventional broadheads, so let me hasten to explain.

The conventional test for a proper edge on a hunting head is to shave the hair from one's arm. It is my personal opinion that such an edge can defeat the purpose for which it is intended.

In the first place, a razor blade is made so that it will cut whiskers from any angle. The steel in it is hardened to an extent that it can take an extremely thin edge and hold it for reasonable use. I know of no conventional arrow head on the market today which is so hardened. Consequently, sharpening arrow head steel to such a degree creates so thin and so soft a cutting edge that it will fold over on contact with almost any surface. Going through the hair and hide





of a big-game animal can actually dull too fine an edge before it gets into the vital areas of the target. Of course, the extent to which the blade of a broadhead can be practically sharpened will be determined to a large degree by the hardness of the steel in it. But don't overdo it.

Secondly, the shape of an arrow head is such that it will slice its way, with the blade always at an angle to the plane of penetration. It never cuts in the manner that is often required of an actual razor blade, i.e. head on to the surface through which it is expected to slice. Anyone is aware that a knife cuts best when the blade is placed at an angle to the cutting surface and a slicing motion is imparted to it. Trying to push the knife blade straight forward is practical only when you are attempting to shave off bits of surface at a time and want to *avoid* deep penetration, as when sharpening a pencil or a tent peg.

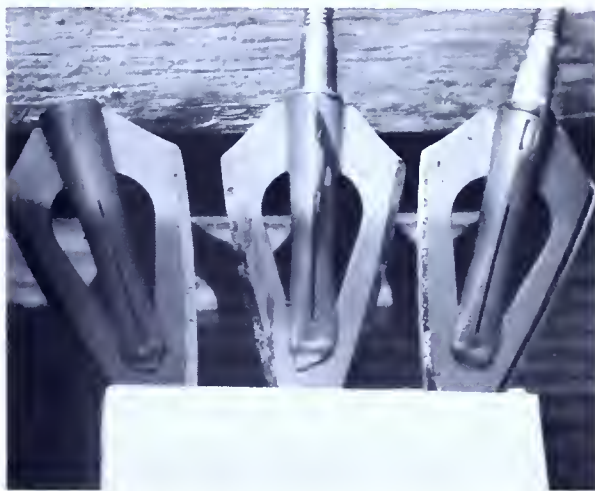
### Fairly Sharp Taper

Nothing here is meant to discourage sharp broadheads. Quite the contrary. However, my personal belief is that a fairly sharp taper to the cutting edge will be sufficient with most steel. In any event, it should conform to the original angle set at the factory of origin. Then it should hold the edge much longer than a razor's edge on steel which is not designed to cut hair. Keep in mind that, no matter how much we try to protect the cutting edge of a broadhead after it is sharpened, leather of a back or side quiver or the broadhead holder of a bow quiver can turn a burr on an edge that is too thin. Personally, if the edge of my broadhead will push its way through one thickness of newspaper held at right angle to it, I consider it sharp enough.

But why be so concerned about sharpness, anyway?

It just makes sense that any blade that is designed to cut will work most efficiently if it is kept sharpened—saw teeth, knives, axes, shears. In the

hunting game there is an underlying reason for such need which goes back to the previously stated necessity of creating a maximum wound. It is fairly common knowledge that an arrow, lacking the shocking power and force of any bullet, must kill by hemorrhage.



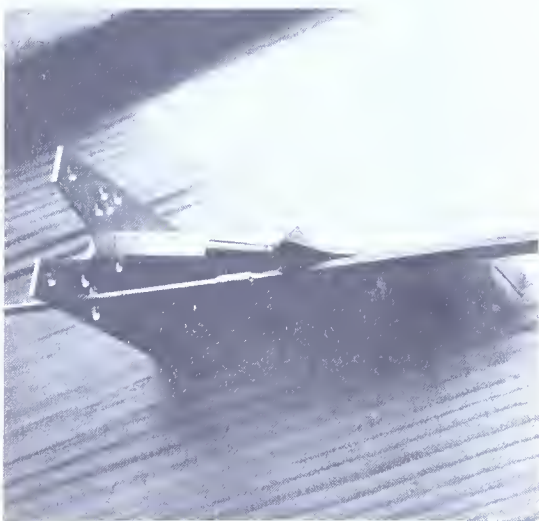
**BROADHEAD WITH** factory finish, left; center, rust and dirt have dulled edges, decreasing efficiency; right, edges have been sharpened for further use.

Hemorrhage is created by the severance of blood vessels, both veins and arteries. These are extremely tough tubes which were created by nature to carry life sustaining blood to and from the heart. Blood itself has the property of coagulation, or clotting, to prevent any creature from succumbing to minor wounds through bleeding. Consequently, in any healthy creature it takes a substantial wound to cause death through excessive hemorrhage. Except for the relatively few times that an animal is killed by a hit in the brain or the spinal column with an arrow, death is effected by the severance of a major artery, a major vein, or massive damage to either or a combination of these vessels. The more damage that is created, the sooner the animal will succumb, a highly desirable outcome of a hit with an arrow.

It is true that penetration into a vital area such as the heart, lungs or liver will induce quick death. The process is speeded up in proportion to the additional damage caused by the arrowhead on its way to such areas. This in itself is reason enough to want sharp arrows. Because blood vessels are tough, we want to hold a sharp enough edge that the blade will sever such vessels rather than merely push them aside.

### Seconds Count

Seconds count to the bow hunter who makes a successful hit. Since there is considerable evidence that most animals feel little, if any, pain when struck by an arrow, their remaining energies are expended in an attempt to escape. They are more likely running from the sound of the bow release, or the motion created by it, than the arrow itself. Nevertheless, a deer can cover long distances in but seconds. How many seconds will be determined by the damage done at the instant of the hit *as well as* any secondary damage done by a sharp broadhead in the vitals while the animal is moving. Under October conditions in Pennsylvania, a deer can



**THIS SIMPLE TOOL** provides a neat method of putting sharp edges on broadhead blades. Holes that guide file permit different angles on cutting edges.

be lost in the heavy foliage unless it drops soon after the hit or leaves a good blood trail.

The need for a blood trail is in itself sufficient to require sharp broadheads, for the blood trail will be somewhat related to the amount of damage caused by the arrow. All hunters should bear in mind, however, the fact that a mortally wounded deer may leave practically no evidence of its injury even though internal bleeding will bring it down within seconds. This is reason enough to always follow up any shot unless there is positive evidence that a miss was made (like an arrow in a stick!).

### Multiple Blades

Because penetration is so important, the need for a sharp cutting edge increases somewhat in proportion to the width of the blade. Multiple blades, rather than the classic two, increase the drag on broadhead penetration in total and further indicate a need for sharp blades. Certain of these multiple-bladed heads are difficult to sharpen.

This brings us to the sharpening process itself. Before going further, let it suffice to say that any good sharpening files such as those for lawnmowers, or the small ones designed for easy carry by the bow hunter, will provide a fair edge on a broadhead blade. What they will not do is provide a constant cutting angle simply because of human inability to maintain it. It is also difficult to take the same amount of weight from each blade.

This latter statement does not at first glance appear to have any significance, for the normal helical in the fletching of a big game hunting arrow causes the shaft to rotate and dampen out error in flight caused by any normal imbalance in the arrow or any tendency to plane. Notwithstanding this, anything we can do to reduce imperfections is a plus value.

One of the best assists to appear on the market for bow hunters in this de-



partment are Broadhead Sharpeners developed by Ray Longbrake, of Grafton, Ohio 44044. I first saw them demonstrated at the Forksville Bow Hunters Festival and the tools really work. A simple clamp holds any broadhead by a single blade, either by itself or when attached to a shaft. A three-cornered file, with a heavy wire rod attached to one end, is placed in one of several holes of an upright plate at the end opposite the arrow head. This permits the operator to choose the angle he wants on the blade as well as to find a position which will allow the file to contact the cutting edge.

Advantages become obvious since it is easy to watch the fresh surface develop and to maintain a straight edge. A separate tool, which operates similarly, is designed for two-bladed heads only. In addition, a finishing oil stone which operates in exactly the same manner as the file can be purchased separately for use with either tool.

This brings out another point which might be considered debatable. Is it necessary to hone an even finer edge on a broadhead after the file has been used? No, it isn't necessary. But, again, there will be a slight advantage. You will have a smoother cutting edge and the filed slopes will pick up less dirt and moisture and will be less inclined to rust. A sharpening kit called "Razor Edge," is available at Box 2203, Butler, Wisconsin 53007, for the purpose.

### Rusting

Rusting is a problem. Once you file away the factory finish, rust just naturally accrues to the unprotected part of the metal. One of the space age antimoisture agents used on the entire head discourages this.

When to sharpen? This becomes a matter of personal preference depending upon what the individual feels he needs for whatever type of game he is after. Some reach for the file as soon as they get a new set of broadheads.

They aren't necessarily looking for exercise, either. One of the best hunting heads on the market sometimes comes complete with a set of burrs on the cutting edge. It is also one of the poorest to hold an edge. If it wasn't for its excellent design, these heads long ago would have gone to the unhappy hunting ground.



**IN AN EMERGENCY**, any good file will provide a passable job, although some might want to stone a smooth edge on blades. Handling broadheads like this one should be done carefully.

As a means of protecting heads once they are properly sharpened, there are plastic Pro-tect-to-tips which fit over them to keep them clean and sharp. These gadgets are sold by Plastic-Coaters, Dept. AW-228 Carlin Court, Hartland, Wisconsin 53029, if you can't find them locally.

Certainly one of the biggest boosts for bow hunters came in the Bear Converta-Point components introduced not too many moons ago. A similar component is now sold under the Kinsey brand here in Pennsylvania at Mt. Joy. The big idea behind this is the practicality of quickly converting from a target point or a blunt head to a broadhead. As the weight of each head is the same, there should be little, if any, difference in arrow

flight characteristics. An archer who can score well on targets should be able to do comparably well in the hunting field with broadheads which screw into the same adapter that accommodates the other heads. The idea has been extended to fiberglass and, more recently, wooden shafts.

Formerly, it was almost a necessity for the serious bow hunter to risk a couple of his best broadheads in a clay bank, sand trap or cinder pile to determine their flight performance. We always used to save one of the beatup straw targets from summer shooting for similar practice just prior to the hunting season. It is still a recommended procedure here for those who don't acquire the changeable head components. However, a session with a file or head sharpening device is a requisite after such practice.

One thing to keep in mind when practicing before the hunting season is that your hunting arrows should perform closely to the same weight target arrow and head if the fletching is the same. If there is a great variation in performance, check the broadhead closely, particularly if it is affixed directly to a wooden shaft. It is neces-

sary to have perfect alignment if the arrow is to fly straight.

Under no circumstances expect that you will get good results by placing on the same shaft a broadhead of different weight than the target heads you have been using. If you do, the arrow shaft was of improper spine for target use. This is elementary information, but it is surprising how some archers prepare for the season.

Whatever your plans for hunting, be sure to give attention to the cutting edge of your broadheads. The point of the head may direct the penetration, but it is the cutting edge which will provide the means to a clean kill. Have some way of keeping your broadheads sharp, whether it is but a small file or one of the more sophisticated sharpening tools. Either can be kept handy in your duffle or in the car.

Then, when time weighs heavily on your hands while waiting for the season to begin or the start of the next day's hunt, give your broadheads at least a caress or two to clean up and sharpen up for the big moment when it arrives. Don't waste your power of penetration.

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## Book Review . . .

### The Passing of the Great West

George Bird Grinnell has been called the father of American conservation and this book helps us to understand why. Based on his previously unpublished memoir and edited by historian John T. Reiger, it gives a vast amount of information on the formative period of his life, from age 21 when he accompanied Professor O. C. Marsh west on his geological expedition of 1870, until 1883. During these years he spent considerable time in the Black Hills with General Custer and journeyed farther west with Captain William Ludlow's group on his reconnaissance of the Yellowstone area. He hunted buffalo, elk, deer and antelope, he collected fossils and artifacts, he studied the Plains Indians, the wildlife, and the wilderness. And he saw that all of these things would soon disappear if nothing were done to preserve them. From this experience, he later became an advisor to Teddy Roosevelt on conservation and Indian affairs, helped found the Boone & Crockett Club and the first Audubon society, and became editor of "Forest & Stream." A fascinating book, both for the insight it gives into the life of a great conservationist and also for the accurate portrayal of the opening of our West. (*The Passing of the Great West*, by George Bird Grinnell, edited by John F. Reiger, Winchester Press, 460 Park Ave., New York City 10022, 1972. 182 pp. \$8.95.)



# You Can't Shoot Any Better Than You Can See

By Don Lewis

*Photos by Helen Lewis*

**T**HE HUNTER hurried along the top of the ridge, trying to follow the faint outline of an old tram road. In a few places the road depression could be seen distinctly, but in others the scrub brush and saplings wiped out every trace of it.

The hunter was no stranger to this woods since he and his father had cut mine posts on this very ridge many years before. In those days, the tram was the only access to Indian Rock, and even then the journey had to be made on foot or by wagon since no vehicle, not even the famous Model A Ford, could navigate the steep slopes and hard curves. Indian Rock was a fraction over two miles from the main highway, but only an occasional hunter ever climbed to its top to watch the numerous deer crossings in the valley below. The hunter checked his watch and kept a worried eye on the ominous snow clouds that darkened the sky.

The hunter hoped to eat lunch on top of the big rock and it was shortly after noontime when he reached his destination. The big rock jutted out into space and dominated the entire hillside. It was a tremendous spot to watch from, as the valley floor for some strange reason had not fallen victim to the onslaught of nature's vegetation. At least that was how he remembered it.

It took several minutes of hard climbing to get the top, but it took just a few seconds for him to realize that nature never gives up and the valley floor was no longer visible.

Disgusted, he sat down to eat his lunch and draw up a new set of plans.



**REDFIELD 3200 target scope in 12x permitted precise aim at this chuck's head at better than 235 yards. 222 Remington and Lewis's trigger finger did the rest.**

With a cup of coffee in one hand and a large sandwich in the other, he was caught totally off guard when three does and a buck walked within 40 yards of the rock. Dropping his lunch, he grabbed his Model 70 30-06 just as the deer disappeared in the brush.

The hunter held the rifle against his



**REDFIELD 4-12x on Mauser, left, and Bausch & Lomb 2½-8x on left-handed Savage M-110, right, give big game hunters a choice of magnification for all situations.**

shoulder, waiting for a shot. It was nerve-racking as the deer appeared for an instant, then disappeared. Twice the small herd stopped and milled around, but the hunter could not tell which deer was legal. Remembering his binoculars, he studied the deer herd and noted the buck was to the right. But when he raised his rifle, the deer seemed to melt together, and through the open sights he couldn't tell which one was legal. Anger and frustration rose in him as he checked several more times through the binoculars. Each time the buck was easy to see that way, but it was impossible through the sights of the Winchester.

Two minutes later, the four deer were still less than 75 yards from the hunter, but it was a hopeless situation. Not wanting to give up, he watched and waited. It was then he recalled a friend suggesting he should have a scope. This hadn't made sense at the time, especially when he knew the longest shot he could get in his type of deer country was less than 100 yards, and he believed scopes were

not made for short range shooting.

Soon, the deer wandered off. He sat on the big rock, staring dejectedly at his boots, knowing that the lack of a scope had cost him a shot at the buck. It had been hard for him to accept that a scope could be of any value in heavy brush, yet there was nothing else to blame for he had easily seen the buck through the glasses. He came to the conclusion a scope would have made the difference. If he'd had one, he probably would have been field-dressing his buck right now instead of sitting there so glumly.

### Theory

He had a fair knowledge of scopes, but never had used one while hunting. He'd based his opposition on theory rather than actual hunting experiences. He recalled with a twinge how he'd downgraded "those glass sights" while talking with other hunters. In fact, the friend who had suggested a scope was one of his closest hunting companions. He considered this friend a "scope nut," and their heated discussions over scopes versus open sights had been many and long.

The friend had told him a scope was an asset under all conditions except perhaps during heavy rains or snows or dense fog. This he just wouldn't accept, and so it went. Practically every time the two got together, the scope argument came up, and a hot session would follow. One thing that kept gnawing him as he sat on Indian Rock was one particular comment constantly made by his friend: "It'll dawn on you someday that you can't shoot any better than you can see." He had never believed that day would come, but it had and he was man enough to admit that his





own shortsightedness had cost him a shot at this buck.

I know of no other aspect of hunting that still raises the hackles of some big game hunters as does the scope question. I hear it many times each year. It does not always originate with the old-timers who have been heavy brush hunters most of their lives. Some hunters, such as the man mentioned in this article, just assume the rifle scope has no place on the 30-30, 32 Special, 348 Winchester or 35 Remington. I have found another segment who really believe a scope is just for those hunters with failing vision. During the years, I've had dozens of calls from hunters past middle age who told me it was getting time for them to install a scope. One gentleman said he still could see the open sights well enough, but he had always heard when glasses were needed so was a scope.

These beliefs have little validity. A scope is not just for old hunters; it's not just for weak eyes, nor is it just for long range shooting. The scope is a fine optical instrument that makes the target appear more visible, brighter and closer. It cannot be classed in any other category. I have never been able to understand why hunters want to categorize the scope, or why they won't accept it for what it really is: a genuine benefit for any hunter under most hunting conditions.

### Many Unqualified

We miss the point entirely when we accept these statements by hunters who probably know little about the scope. Just as many hunters, who have never fired one, condemn the modern Magnum rifle's place in today's shooting, so do many unqualified hunters criticize the rifle scope. From personal observation and first hand experiences, I feel most of the complaints against scopes come from people who never spent one day hunting with a scope.

I wouldn't know how many times at the benchrest I've seen good hunt-



**FOR HUNTERS WHO** don't need the wide power range of the 4-12x Redfield, bottom, a medium-size variable such as the 2-7x Leupold, on M-77 Ruger, top, can be the answer.

ers change their minds when they were properly instructed on how to use a scope and what can be expected from one. Only a few years back, I listened patiently as a middle-age hunter explained how he would never use a scope unless he went West. Minutes later, he fired five shots from my Sako 22-250 heavy barrel into less than an inch group at 100 yards, and then failed to hit a two-inch bullseye with his own chuck rifle using receiver sights. He got very interested in a scope. In fact, his interest was so great, he fired a full box of my ammo through the Sako, convincing himself he should get one.

When I get involved in these discussions, I usually do just what I did with this man: settle the argument by giving the other person a chance to fire a good scoped rifle. Invariably, each shooter surprises himself at how well he can shoot, and in almost every case he admits that somewhere along the line he was misinformed.

There is really no strong argument against the rifle scope. If properly mounted, adjusted and focused for the user, it will give a sharp, clear picture of the target. The better the target can be seen, the better the shooter can



**ANOTHER ADVANTAGE** of the variable is that its high power setting can be used for testing loads and zeroing in, while lower magnification is available for woods hunting.

place the bullet. When a man or woman shoots a small group from the bench with one of my scoped hunting rifles, I tell them the same good shooting could be done with his or her own rifle if it had a scope. Many times I've had them tell me my rifle must be a good one to shoot such a tight group. Apparently, they feel the rifle was the reason for fairly good groups from inexperienced shooters. I just reiterate what the friend told the man mentioned earlier—"You can't shoot any better than you can see." That happens to be the honest truth.

It's of little consequence what style or type of open sight is used, it does nothing to brighten the target, aid a vision defect, or permit precise bullet placement. The scope does all this and more. I've always claimed a scope should be as personal as a toothbrush. It's imperative it be mounted, adjusted for eye relief, and focused for just one person. Many years ago I installed a scope on a 94 Winchester for a man who had suffered a severe neck injury. It was impossible for him

to shoot in an orthodox manner; he couldn't bend or twist his neck. After some trial and error, I installed a thick plate of steel that extended a half inch higher than the top of the action, then mounted the scope on the plate. It was the weirdest mount job I ever did, but it solved the man's problem, and he was back in business.

This may sound strange, but there is no general way to mount a scope any more than an optician can make eyeglasses without first examining the patient. Not enough emphasis is placed upon scope mounting and focusing, and it's one of the main reasons, in my opinion, why many hunters have poor results with scopes. I might be going out on the limb again, but in my opinion a scope that is not mounted correctly is just added weight.

During the last five years or so, there have been dramatic changes in scopes. I'm not speaking so much of external design—although Redfield has a good thing going for them with their Widefield models—or added gimmicks that make the reticle easier to see. I'm referring to internal changes. The most common failure was fogging when the scope was subjected to severe weather changes. In many cases, this annoying problem left the hunter without a sight, and it's easy to see why some fellows are against scopes. Today, things have changed for the better.

### **No Pushover**

The modern scope is no pushover. Due to new sealing cements and closer mechanical tolerances, the modern scope is not an easy victim of the elements. This doesn't mean some care must not be exercised to protect the end lenses from being covered with snow or rain. But internal fogging is practically a thing of the past in the higher quality models. Leupold, Redfield, Weaver, Bausch & Lomb and some others have largely solved the fogging problem.

Instead of worrying too much about





**"AFTER ALL MY TALK ABOUT SCOPES, you hadda go shoot this critter with that old iron-sighted 348," Don Lewis seems to be telling his son Tim. "I oughta let you drag it in alone!"**

scope failures, I suggest more time be given to selecting the proper scope. Believe me, the answer is not just a 4-12X variable or a straight 4X. These scopes have plenty to offer, but the answer is not that easy. It comes right down to what I said earlier about the scope being a personal item. When the hunter fails to realize this, the wrong scope very likely will be purchased.

For too many years, the big game hunter settled for 2½X or 4X scopes. This is what the experts said should be used, and it became an entrenched idea that is hard to shake loose. I suppose more rifles still carry the 4X scope than all other powers put together. I feel it shouldn't be that way any longer.

I suppose I'm bordering on heresy, but I believe the fixed low power will soon be just a memory. In fact, I'll go one step farther and state that the straight 2½X and 4X powers should be phased out. This will certainly raise the blood pressure of thousands

of hunters who have had wonderful relationships with these two powers, but facts are facts, and all things eventually fall to the way of progress.

What makes me take this unprecedented step? Why do I say these things when most of my rifles still have 4X scopes attached? It's not because I'm a crusader or am miserable by nature. From years of shooting during the open sight era to the day of the fine rifle scope, I've come to the conclusion that the new variables are in a class that can't be overlooked. I'm of the opinion that the big game hunter in Pennsylvania will do better if he takes advantage of one of the fine 2-7X variable powers. Notice, I didn't suggest the 3-9X or 4-12X. They usually are fine optically, but are comparatively big and heavy. The 2-7X is compact, can be mounted low on the rifle since its objective lens is not overly large, and allows the hunter to have the wide field of view at 2X for close brush shots and the strong 7X for open country.

There's nothing wrong with the higher powered variables, but I feel the average hunter will do better with the lighter, more compact 2-7X class.

As I see it, the 2-7X encompasses all the aspects of the 2½X or 4X scope with additional power at the shooter's command. This came to me years ago when I made a study of rifle scopes. I had long accepted the time-worn theory that the low power scopes were a must for the big game rifle. Also, back then, variable power scopes were not as dependable as the product turned out today. When I came to my senses and realized the variables offered more than the fixed powers, I began to change my way of thinking.

I have no doubts that if I write an article on scopes a dozen years from now, I'll probably admit that the scopes of that era are far superior to the products I'm writing about now. Time and progress change all material things. I remember well the criticism and sarcasm the automatic transmission received back in the early 1940s. Today, it has proved superior to the shift type. That is how I feel about power in scopes. The shift to the high quality variable may be breaking tradition, but it has many advantages.

Put a good variable on your favorite rifle and learn to use it. Chances are, you'll appreciate the extra power. And as the fellow said, "You can't shoot any better than you can see."

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### Music Hath Charms?

Human beings enjoy bird song, but few understand that many melodies are territorial warnings. Having established nesting sites, birds sing to establish their stamping grounds and to erect vocal no-trespassing signs. In song-bird language, that sweet trill really says: "Keep out, or I'll peck you bald!"

## Looking Backward . . .

Wm. Coulter and a Mr. Bartlebaugh were following the tracks of a deer, about ten miles north of this place, on Friday, the 12th inst.; they soon came to the deer, which appeared to have been lately killed by some animals; its entrails were torn out, and its carcass otherwise much mutilated. They soon observed tracks of a wild cat, and tracing them a short distance, it was discovered the cat had entered a hole in a ledge of rocks. A trap was prepared, and set at the mouth of the hole. Next morning, the wild cat, nearly full grown, was found in the trap—fast by the toes of the fore foot. The question then was, how to secure him alive. Coulter directed Bartlebaugh "to amuse him with a stick," and he thought "he could take one wild cat, for Davy Crockett had licked his weight of them." The attention of pussy being taken up with the stick, Coulter caught it by the back of the neck, threw it, and got his knees upon it. They then took their suspenders and tied the feet, and Bill pulled off one of his stockings, and drew it over its head; thus secured, they carried it home, and now have it ready for Mr. Van Amburg, whenever he thinks fit to order it. (Indiana Register) (Hollidaysburg Register & Blair County Inquirer, Jan. 31, 1849)



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# Pennsylvania Seasons and Bag Limits 1972-1973

The Pennsylvania Game Commission, in Harrisburg on June 1, 1972, established the following seasons and bag limits for resident game and furbearers for the 1972-1973 hunting license year which begins September 1.

Open season includes first and last dates listed, Sundays excepted, for game. The opening hour for small game, migratory game birds and other wild birds or animals on October 8 will be 9:00 a.m., D.S.T. Shooting hours for other days and seasons will be from one-half hour before sunrise until sunset except raccoons which may be hunted any hour and turkey gobblers (spring season) from one half hour before sunrise until 11:00 a.m., D.S.T. Shooting hours for migratory birds will be announced later.

## SMALL GAME

Daily Limit	Possession Limit		DATES OF OPEN SEASONS	
			First Day	Last Day
6	12	Squirrels, Gray, Black and Fox (combined) .....	Oct. 14	Nov. 25 AND
2	4	Ruffed Grouse .....	Dec. 26	Jan. 13, 1973
4	8	Rabbits, Cottontail .....	Oct. 14	Nov. 25 AND
2	4	Ring-necked Pheasants, males only (except in designated area)* .....	Dec. 26	Jan. 13, 1973
4	8	Bobwhite Quail .....	Oct. 28	Nov. 25 AND
Unlimited		Raccoons (hunting or trapping) .....	Dec. 26	Jan. 13, 1973
Unlimited		Woodchucks (Groundhogs) .....	Oct. 28	Nov. 25
Unlimited		Squirrels, Red .....	Oct. 28	Nov. 25
			No close season	
			No close season	
			All months except	
			Oct. 2-13 incl.	
1	1	Wild Turkey—Counties, and parts of, listed below** .....	Oct. 28	Nov. 25
1	1	—Counties, and parts of, not listed below .....	(Except Nov. 20 & 21)	
2	4	—Spring Gobbler Season (bearded birds only) .....	Oct. 28	Nov. 18
		Hares (Snowshoe Rabbits) or Varying Hares .....	May 5	May 19, 1973
			Dec. 26	Dec. 30

## BIG GAME

1	1	Bear, over 1 year old, by individual or by hunting party of two or more. Tentative—confirmation by Sep. 4. ....	Nov. 20	
		Deer, Archery Season, any deer—Statewide .....	Sep. 30	Oct. 27 AND
		Deer, Antlered, with 2 or more points to an antler or a spike 3 or more inches long .....	Dec. 26	Jan. 13, 1973
1	1	Deer, Antlered and Antlerless, with required antlerless license, buckshot only in Special Regulations Area listed below*** .....	Nov. 27	Dec. 9
		Deer, Antlerless—Statewide .....	Nov. 27	Dec. 9
		—Counties, and parts of, listed below*** .....	Dec. 11	Dec. 12
			Dec. 11	Dec. 16

## FURBEARERS

Unlimited		Skunks and Opossums .....	No close season	
Unlimited		Minks .....	Nov. 23	Jan. 21, 1973
Unlimited		Muskrats (traps only) .....	Nov. 23	Jan. 21, 1973
8	8	Beavers (traps only)—Counties of Susquehanna and Wayne .....	Feb. 3	Mar. 18, 1973
3	3	Beavers (traps only)—Remainder of State .....	Feb. 3	Mar. 4, 1973

NO OPEN SEASON—Cub Bears, Elk, Otters, Hungarian Partridges, Sharp-tailed Grouse, Bobcat or Wildcat.

NO CLOSE SEASON—Chukar Partridges.

\* For special regulations concerning deer, turkeys and beaver, consult the 1972-73 Hunting and Trapping Digest.



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#### COVER PAINTING BY TAYLOR OUGHTON

The black bear—*Ursus americanus*—is the largest carnivore in Pennsylvania. Its total length often exceeds five feet when fully grown and weights of 250 to 400 pounds are common. Occasional individuals have reached perhaps 600 pounds, which is more than many grizzlies weigh. The blackie's temperament is far different, though. He's often called "the clown of the woods"—a nickname no one ever thought of tagging a grizzly with—and he's so shy that the person who merely sees one talks about the event for a long time. Nevertheless, Pennsylvania still has a reasonable population of these animals, and with proper management they will continue to be found in our woods.

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# What Do You Expect?

**E**VERY YEAR when the trees start to unfold their temporary cloaks of fiery reds, vivid scarlets and blinding yellows, and when the ground wears a shimmering white mantle before being chased by the sun's early undulating rays, there is a certain fullness in the chests of a million or more Pennsylvanians. The heart seems to beat a little faster, albeit lighter, the head and feet appear to whip along faintly with the breeze just slightly faster than the trunk of the body, the shoes aren't nearly as heavy as they were a few months back, and breathing is more rapid. It's an exhilarating feeling. It's anticipation. It's hunting season.

For the youngster who's never had a hunting license before, the emotion can hardly be contained. The experienced sportsman tries to be blasé about the whole thing, but those who know him well recognize it for the coverup it really is. A few let down the bars so the excitement can be seen. But all of them have hopes about the hunting season, and many have expectations. For 1972, what do you expect?

Will it be enough for you to trudge through sticky swamps or bottomlands, scanning every little clump of grass and pile of brush in hopes of seeing one of earth's natural creatures tear out from behind it in an effort to put several hundred yards between the two of you in a few seconds?

Will you be satisfied to be with your son or daughter in the relatively clean outdoor air, or to take another fatherless boy or girl along, to teach them respect for the wildlife put here not by man but a far superior being for our enjoyment and benefit? Do you expect to have more reverence for both life and death at the end of this hunting season?

Are you likely to notice how man has defiled this world with his wanton waste, greed and pollution? Can you appreciate the wildlife that is still left for our use, and that certain things will have to be done if we are to continue to see it in the future?

Or do you expect to get your share of game because your hunting license "owes" you your limit of game? Are you one who can't wait to show your buddies that you are the better hunter? Do you think that your wife or children will regard you as a bigger or better man when you return home with your limit?

After you've bagged that first pheasant, do the tail feathers sticking out of your hunting jacket make you several inches taller and several pounds heavier? Or do the ten points on the rack of a buck on your car make you more of an expert than the guy who only has a six-pointer on his pickup?

Are you sure that if you cover a certain number of miles, either on foot or from the comfort of a vehicle, that you are entitled to a certain number of pieces of wildlife? How many times should you be drenched to the skin by rain before you shoot the first squirrel? Or how far below zero must the thermometer register before you are assured of your deer?

If you have spent 1,000 hours training your dog to point and retrieve, how many quail should you put in your game bag before the final day of the season?

You surely are aware that many pieces of game will not live through the coming winter, even if there were no hunting season. How many are you entitled to take?

What do you expect this year? Think about it. — *Ted Godshall*





# In A Turkey Tizzy

By Shirley Grenoble

**B**EING a confirmed turkey hunter may seem a strange affliction for a woman. The fair sex is generally considered completely incompatible with the hunting scene. "Popular" opinion usually sees the female as a tearful Minnie trying to keep her ruthless husband from shooting the poor little Bambis.

Be that as it may, I decided early in my marriage to try the "if you can't beat 'em, join 'em" tactic. My husband Ken as an avid hunter and sportsman. His exciting hunting tales sure sounded like an improvement on the dust mop and dish cloth routine, so one day I prevailed upon him to take me along turkey hunting. What followed was one of those "baptism by fire" experiences!

We'd hiked about a mile into the woods when we ran smack into a flock of turkeys! Ken ran toward them shouting and shooting into the air. I stood there wondering if this were standard procedure and if the whole idea was to scare them to death. Bristling with excitement, Ken motioned me to follow him. We set off at a trot to the point of the mountain. Ken hid me in some laurel and told me to watch while he worked the turkey call.

Watch I did! What I watched was the biggest gobbler of all time stroll past me within five yards! He was gobbling and seratching at the leaves, seemingly reluctant to go any farther. The woods were ringing with turkey voices and I was choking on my own excitement. Right there in that clump of laurel the housewife-to-turkey-hunter metamorphosis took place! I was hooked!

Ken bagged a hen from the flock that day, which ended the turkey hunting for that year.

Shortly thereafter we moved out of

the state. Providence was on my side, however, and in the early 1960s we were transferred back to Sayre, Pa., where Ken now works as youth director for a church and I am the church secretary, piano teacher and mother of a teenage son.

"Say, if you're interested in turkey hunting, why don't you go down to Barclay Mountain? My father owns some land there and you can drive right up to the base of the mountain. If you like, I'll take you down and introduce you." Those words, spoken by a friend, started me on a turkey adventure that nearly drove me to the brink of lunacy.

It was the opening Monday of turkey season, 1965. I drove south of Towanda for about eight miles, turned off onto a side road at Franklindale, then onto my friend's farm. I stopped to let him know I was going up to the mountain. He gave me that "you're not really serious, are you?" look—to which I have long since become accustomed—but all he said was, "Good luck!"

## A Golden Day

It was a golden day, warm and clear. As I loaded my 20-gauge shotgun I was filled with the thrill of anticipation I feel whenever I enter Penn's Woods.

It was a steep but beautiful climb. Once on top I walked along the ridge keeping the valley and Route 414 in sight. After about an hour at my hunting pace (five or six steps then a pause to look and listen), I came to a ravine. I caught a glimpse of movement on the far side. There they were! Four big turkeys about 150 yards away! I scarcely believed what I was seeing. I remember thinking, "Well, this is just too easy." Nevertheless, cold prickles were dancing a



**WE RAN SMACK** into a flock of turkeys. Ken ran toward them, shouting, and I stood there wondering if this were standard procedure and if the whole idea was to scare them to death.

jig up and down along my spine.

What should I do? I was caught in the open. The turkeys were out of shotgun range and feeding away from me. I dropped to my hands and knees and backtracked until I was sure I was out of sight. Then I circled around to where I guessed the turkeys might come through. Concealing myself behind a clump of laurel, I settled down to wait. Nearly an hour had passed when I heard that first "perk" of feeding turkeys. So I had figured this out right! Suddenly I couldn't breathe and I itched all over yet I dared not move! Already congratulating myself on my success, I eased the gun into shooting position.

*Bang! Bang! Bang!* It was incredible! Three hunters were hidden in the brush between me and the turkeys! At their shots, the turkeys

flew. The men took off down the mountain in hot pursuit.

I've never felt more ridiculous. I had sneaked into the fringes of another hunting party and hadn't even known they were there.

Deflated, I decided there was nothing to do but move on. I'd spend the rest of the day learning the country. When I came to the point of the mountain I saw some large rocks jutting out, forming a small cliff. I sat down on them, marveling at the view. Three deer feeding on acorns in the ravine below me slowly worked their way to the top. I settled back to watch them and enjoy the scenery. Lulled by the delicious sun, I dozed.

I woke with a start. I could hear a curious din in the distance but couldn't identify it. I'd never heard anything like it before. I thought perhaps a flock of geese had landed in the woods, but that didn't seem very likely. Suddenly I broke into a cold sweat. A flock of turkeys was running full speed through the woods right toward me! I scrambled off the rocks and flattened myself against a tree. Things were happening so fast I wasn't sure what else to do.

### On Hands and Knees

Behind me the land sloped upward about 75 yards then leveled off into a bench. The turkeys piled gabbling onto this bench directly above me. They sounded as confused as I was. What should I do now? I waited awhile but they showed no sign of moving down, so I began inching my way up the knoll on hands and knees.

When I reached the crest I eased up behind a tree. There they stood! I drew a bead on one that was looking straight at me and fired. I missed! The flock (about 20 birds) turned en masse and ran. I threw another shot. Another miss!

Now the woods were very quiet. I wondered if the whole thing was a bad dream. "No one will ever believe this," I muttered. Resigned to whatever fates were arranging this day, I



walked on through the quiet forest.

About 2:30 I began retracing my steps to the car. After awhile I heard a squirrel in the leaves just over the edge. Deciding a squirrel in the pot was better than nothing, I sneaked over to see if I could bag it. The squirrel turned out to be two turkeys. I was so surprised I only got off a fleeting shot as they took wing down into the valley.

As I drove the 20 miles home I reviewed this fantastic day's events over and over. One thing I was sure of—it might take some juggling but I'd be back again as soon as possible.

When I arrived home, my husband innocently said, "Hi, see any turkeys?" I promptly became hysterical! Everything gushed out in one big babble. Ken roared with laughter. His amusement with my frustrating predicament made me very upset (that's putting it kindly). I determined then and there that no flock of Pennsylvania turkeys would make a fool of me! I'd get one or die in the attempt!

Thursday dawned cold but clear and dawn found me on my way to the mountain. The ironing would have to wait. I had a turkey to get.

By now I had purchased a topographic map of the area. It showed that an old road ran along the top of the mountain. I found it and walked for miles, expecting to see "my" turkeys around each bend. All I saw, though, was a huge torn-up area where they'd scratched the day before. I was elated to see they were still using the area.

One surprising thing was that I was not seeing any other hunters in this easily accessible area.

At home that night, I found it hard to sleep. I kept trying to plan a strategy for Saturday, which day arrived cold and blowing. Ken had the audacity to suggest I go rabbit hunting with him. Rabbit hunting, indeed. I was a turkey hunter!

By the time I reached the mountain the ground was covered with snow. I

ignored the impending blizzard; I had to find the turkeys. On top the wind was blowing fiercely and the driving snow made it difficult to see over a few yards. As I walked, I chided myself for having lost every vestige of common sense I'd ever possessed.

Just after noon I heard a noise behind me. I froze in my tracks. A doe and a 6-point buck came running right up to me. Then they dashed down over the hill and right into the turkeys—which came dashing up the hill, scolding loudly! They quickly angled down through the woods, never offering a shot, and I could hear them protesting long after they were out of sight.

### Tracking Useless

Tracking them was useless. The wind-blown snow was covering their tracks as fast as they were making them. Somehow it all seemed ludicrous. I decided this particular flock of turkeys just didn't like to be disturbed. They certainly did enough screeching! By now the storm had gotten very bad and I decided to go home.

Monday found me on the mountain again. I cut directly over to the trail. I'd gone half a mile or so when I saw two turkeys racing around a small rise, out of shotgun range. I started running down the trail, intending to go to the head of the next ravine to possibly intercept them there. But I got only about 300 yards when those two turkeys exploded out of the brush nearly at my feet. Apparently they'd circled completely around the nob and we'd met head-on! The absolute unexpectedness of it so unnerved me I never got off a shot! I just stood forlornly on the trail, not knowing whether to laugh or cry.

This whole situation was getting sublimely ridiculous. My turkey tales were getting harder and harder for my husband and friends to believe. I was getting glassy-eyed from frustration and I lay awake nights reliving each encounter. I was eating and

sleeping turkeys those days and determined to pursue them to the bitter end.

Three times more that week I went to Barclay but saw not a sign of the turkeys. Perhaps they were as tired of being harassed by me as I was of chasing them. "Probably moved to new territory," I reasoned.

Now it was Monday of the last week of season. On the way to Barclay I tried to sort out my feelings. Since I'd been seeing turkeys out of shotgun range so often, I decided to bring my rifle and light loads instead of the shotgun. I knew I was a better shot with rifle than shotgun and I needed every advantage now. I just had to get one of these turkeys to prove this whole thing was real. I hunted that day with renewed determination.

### One More Step

I sneaked along the ridge, expecting to see a turkey behind every tree. Later I zigzagged between the trail and the edge of the mountain. On my third swing back to the edge I sensed something off to my right. Two deer were standing in the oaks watching me. We stared at each other for a bit then they sauntered away. I took one more step and saw the turkeys.

The whole flock was moving through some thick scrubby growth. All I could see was one head after another passing over the top of the brush. I threw up my rifle and got them in the scope.

How easy it sounds! But keeping the head of a moving turkey in a rifle scope, especially when you have the worst case of turkey fever ever, was painfully unfunny. My knees were vibrating and my arms felt like jelly. Nohow would that scope stay steady. Thus I muffed that chance. They all traipsed (haughtily, it seemed to me) through the brush and over the side. No doubt they looked upon me as a nuisance but no real threat. And that was my last look at turkeys for that day.

Ken tried to placate me that night with the horrifying suggestion that I "forget the whole thing, no turkey is worth it." Not worth it! As far as I I was concerned a turkey was worth almost anything. Besides, I was too committed to quit now.

All household chores were put aside as I went to the mountain Tuesday and Thursday. I could clean house when season was over. But I saw no trace of turkeys either day.

Sunrise Friday found me already on top the mountain. The season would end the next day. Despite my growing pessimism I refused to give up till the last hour of the last day.

I poked around the usual haunts most of the morning. At noon I made my way over to the ravine with the big rocks. I sat down on them as I had my first day on this mountain. I began remembering all that had transpired since last I'd sat here. "Even if I don't get a turkey," I rationalized, "I've had fun chasing them and I've gained a battery of fireside stories to relate." It wasn't much consolation. "Nor is sitting on this rock finding me a turkey," I said. (At this point I was talking to myself regularly. In fact, Ken told me I'd been talking turkey in my sleep lately. Wow, was I really that bad?) I decided to strike through the woods and hit the trail.

After I'd been walking for sometime it occurred to me that I should have come to the trail already. Consultation with map and compass assured me my heading was right so I kept going. The laurel became thicker with each step, making quiet walking impossible. Since I was becoming uneasy I decided to abandon all thought of hunting and just hike till I hit the

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trail. I knew that in my haste I was sounding something akin to a cattle stampede but I didn't care, I just wanted to find the road.

When I was about ready to turn back, I noticed a knob about 50 yards ahead. I'd go to the top of that knoll, look around, and then turn back. When I got there some deer darted out of the laurel. Wait! It wasn't deer—it was turkeys!

In the midst of the laurel about 75 yards away was a big pine tree. The turkeys were racing through this small, clear spot. I shouldered the rifle, fixed the scope on the spot and announced, "The next one to go through there has had it!"

### I Let Go!

An instant later a turkey did run through there and I let go! I lost sight of everything when the gun kicked, but when I raced up to the pine, lying there beneath it was my turkey! And the pine was located right beside the old trail I was looking for.

My joy was indescribable! I sat on the ground and shed tears of elation. I looked at my watch—2:30 p.m. After saying a prayer of thanks I grabbed up the hen to begin the long walk to the car.

Gun in one hand, turkey in the other, I marched triumphantly down the trail. For about 2½ minutes. Then I began to sag. My gun weighs 6½ pounds and the turkey went two ounces under 13 pounds (I had it weighed later in town). They made quite a load. How I wished for a rifle sling. I flopped the turkey over my back and gun under my arm, but to no avail. I sat on a log to rest and there had a brainstorm.

I took off my Woolrich jacket and laid it on the log. I arranged the bird inside it and zippered it shut. Sitting on the ground I slid back to the coat and wrapped both sleeves around my neck. I clutched both sleeves with one hand, keeping the turkey positioned high on my shoulders, and my rifle in the other hand.



**GUN IN ONE** hand, turkey in the other, I marched triumphantly down the trail. For about 2½ minutes. Then I began to sag. My gun weighs 6½ pounds and the turkey went almost 13. They made quite a load. How I wished for a rifle sling.

Knowing I looked like a fugitive from a nightmare, I prayed I wouldn't meet anyone along the trail. When I finally reached my car I was exhausted but exultant.

Once home I put the bird in the garage. When I heard Ken pull into the driveway I sat down on the sofa and waited, acting very nonchalant. He greeted me with the usual, "Well, where's the turkey?" With studied calmness I replied, "In the garage." He did a beautiful double-take and dashed for the garage. My son and I were close at his heels.

Supper burned to a crisp as we cleaned the bird and rehashed the day. That night, as I lay in bed, my thoughts were many. I had won! Persistence had paid! Strangely enough, though, I couldn't get to sleep. After all, deer season was just around the corner and I had to get prepared!



## *Christmas-Tree-Capital Cottontails*

By Nick Sisley

**T**HE HOUNDS FOUND the scent again, and this time they virtually screamed in pursuit. The cottontail must have left a strong, straight scent trail to follow for a change. The sound of the chase went 150 yards out along the pine-covered sidehill we were working, almost out of hearing. Then the rabbit turned up the slope, zigzagging as he went, doubling back once, then hightailing it back across the ridge once he found that the hounds would not be fooled. It was his den he was heading for.

He stopped for a pause on the crest above us, looked back toward his black and brown pursuers, and regained his wind. His den was only a short distance down the hill now. I wonder if he suspected that three hunters were anxiously waiting in the stand of tangled Indiana County pine trees and grapevines that this cottontail called home?

The hounds were drawing closer now, so he started down the hill toward his burrow. My Richland 20-gauge double was ready. There was a charge of low brass 7½s in the right barrel, a more potent 3-inch magnum load of 1¼ ounces of 7½s in the left. I stayed alert, for if I was to get a shot in these pines, it would be close and quick.

The diminutive beagles checked him where he'd sat on top of the ridge, then started down our way. My ears were tuned to pick up any sound the quarry might make slipping past my stand, but it was my eyes that caught the first sign, a flicker of brown. The rabbit was off my left flank, and one of my hunting partners stood beyond.

I had to wait until the rabbit got behind me. I couldn't see him for a moment. Then twenty yards further I saw a blur of brown again. I snap-



ped off a shot, only to see the snow kick up behind the critter. I never saw him again.

I bit my lip in frustration as I waited for the dogs to come up on the trail. That didn't take long, but when they got to the spot where I'd shot, there was a long lull. They didn't get the line again for several minutes. What is it that causes bunnies to suddenly not give off any scent just after being shot at?

The trail lasted only another 50 yards. Busy—short for Weldon Acres Busy—gave her “holed” yelp and came back to her master, Ron Maurer of McKeesport, one of my hunting partners. Busy is 12 years old but still can run a cottontail. She knows how, too, as does the second beagle Ron had along that day, Weldon Acres Barbarian, for both are AKC field champions. At age three, Barbarian is in his prime. As proof of this, he was the winner of the Pennsylvania State Beagle Championship in 1971.

Carl Walcott, a police lieutenant from Greentree, was the other member of our hunting party. Carl is a knowledgeable beagle trial judge in his spare time, and he owned the third beagle in our pack, a female called Lanny.

Indiana County, Pennsylvania, is known world-wide as the Christmas-Tree-Capital of the world. In fact, it's probably where that last tree you decorated with tinsel and silver balls came from. In the eastern sector of the county, there is virtually no hill a hunter can stand on and not see a stand of pines that covers several acres. The pines offer excellent escape cover for bunnies.

Most of the cultivated Christmas trees are posted property, and though there are rabbits in such spots, these are not the ones we seek out for top cottontail sport. What we prefer are the stands of pines that have been planted by some ambitious soul, but which for one reason or another have never been shaped or harvested. In these neglected stands you'll also find

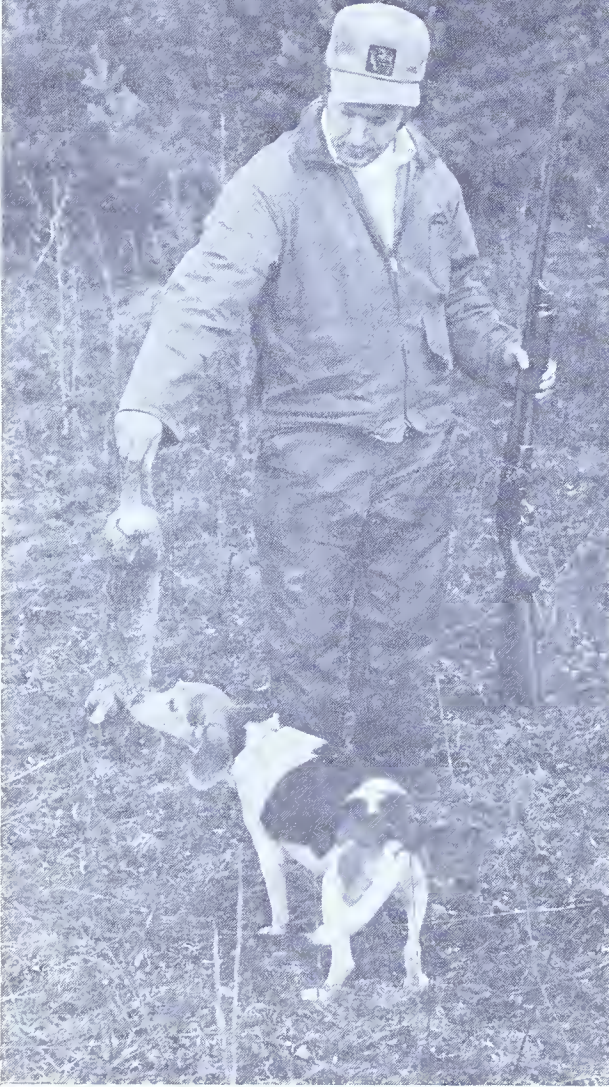
brush, dogwood, crabapple, and grapevines intermixed with the thick evergreens. The pines once may have been intended for someone's living room during the Christmas season, but they were not cared for and never made it. Talk about ideal rabbit cover—this is it!

It didn't take five minutes for the beagles to jump another cottontail out of his sit and again leap screaming in pursuit. And jumping another bunny so quickly was the order of the day. If we got lucky and bagged one, the dogs were off and running another while we were still field-dressing the first. There is one word of regret, however, if you're interested in the main ingredient of hasenpfeffer. You simply don't bag a high percentage of these bunnies that spend their lives in and around the low pines. It's simply too thick for easy shots. Numerous rabbits will run full circle or more, only to den up without the hunter ever seeing one, and if you do glimpse a bunny, it's just that—a glimpse—just as the one I'd missed early in our hunt.

### **Pines are Great**

From the rabbit's standpoint the Christmas pines are great, for they not only keep predators from taking many, but man must also be satisfied with only an occasional score. But who can deny that thick pine stands are a great place to hunt them? Even if you don't bag many, you have the companionship of good friends and the great hound music that goes on and on and on all day. These make rabbit hunting a great sport for us.

The second rabbit the hounds latched on to made two complete circles, and neither Ron, Carl, nor I ever saw him. Guess I'm the nervous type, for I like to keep moving around, guessing where the rabbit is going to run next, trying to anticipate his course and be there to intercept him. Carl moves around reluctantly, but at least to some degree. Not Ron, however. Once the bunny is up, it doesn't



**EVEN AT AGE 12, Busy still knows how to unravel a bunny's trail and appreciates sniffing one close up when her owner, Ron Maurer, connects.**

take him long to choose a stand where he'll remain for the duration of the chase, no matter where it might lead or end up. In a way, I wish I could be as patient as he.

Most rabbits never venture away from their home pine stand during the chase. They know their chances of surviving are best right in that bailiwick of theirs. Bunny number three was the only one that left the pines that day. We three hunters were working abreast through the pines, the dogs ranging and searching for scent ahead. The snow skiff had come just after sunset on the day before, and it had been a windless night, so it was tough to tell if the

bunny tracks we saw were minutes or hours old.

Just outside and above the pines I came upon a track that looked steaming. The bunny had been taking long jumps instead of walking or hopping along as a rabbit normally would if not frightened. I called Ron up to see. He traipsed out of the pines, took one look and turned to call the hounds, but just then Busy sounded off in the pines. Lanny and Barbarian chimed right in.

"Bet this rabbit jumped out ahead of us, left the pines, and started up the hill for those grapevine tangles in the woods," I said.

Ron agreed, and 30 seconds later the hounds verified my speculation. They were coming right up the bunny's trail in the snow. Ron and Carl went around one side of the hill, while I took the other.

### Slow but Thorough

The hounds were slow but thorough, never veering far to the side of the rabbit's trail. At the checks they stayed in close till they found the scent again. Instead of heading back for the pines on the sidehill where Carl and Ron were, the bunny headed right for the knob. He didn't linger in the grapevine tangles there, but just tried to spin the hounds around a few times and then headed back down my side of the hill for the pines.

I was trying to guess where he would come off the knob, but though I kept moving, trying to intercept him, the rabbit came down around the slope too far from where I was to offer a shot. All I saw was the top of the dogs' merry tails in the distance as they, too, headed for the pine plot.

It wasn't long till Carl and Ron rounded the hill, heading my way. Silently we deployed into the pines to take up stands at strategic locations. The skiff of snow made it easy for the diminutive beagles to get along. We sometimes have deeper stuff, and when we do they have a time of it. The morning temperature hovered



around 30 degrees, just right for hunting. There wasn't a cloud in the sky or a hint of a breeze, and the bright sun promised melting snow by afternoon. We all wore warm clothing, so keeping still on watch while the dogs tried to unravel the trail was not uncomfortable.

Suddenly the dogs took off once more. They must have jumped the quarry right from his sit. A brief sight chase and they settled down again to the task. For 15 minutes we contentedly listened to the voices of the beagles. Then Ron's 12-gauge Ithaca cracked the clear air.

"Got him," was the comment. Carl and I walked over to where the hounds were sniffing the bunny. They soon lost interest and drifted off down the hill. Carl held the hind legs to make the field-dressing easier and to hurry the job. Before it was complete, Lanny was barking on a new trail.

Much of this country is posted against hunting, especially the nurseries that specialize in shaping, pruning and cutting the nation's Christmas trees. This is understandable, as workers are almost always busy during our rabbit season, and their safety is paramount. But we have been fortunate in getting permission to hunt areas where the pine plantations have been neglected for some reason, or where they have grown up past the Christmas tree size. Permission always should be obtained before hunting, of course.

Naturally it pays to work the stands that offer at least an occasional opening for a shot. Some are so thick they don't have a break for acres. We avoid these. Stands about 15 years old seem best, especially if there is an intermixture of brush and varied rabbit foods to go with the evergreens. Some plantings encompass 40 or more acres. We have luck occasionally in such places, but there is usually a more varied food supply in the smaller plots. We like them about five acres in size, perhaps slightly larger. In fact,

the pine plot we hunted on the day described was barely five acres, and excepting for leaving its perimeter once, all our hunting took place in that small acreage.

The best weather for bunny hunting is always a debatable question. In the extended season it is often excellent when skies are clear and temperature moderate, but in November, give me a slight drizzle. Once the rabbit is up and moving ahead of the hounds, it doesn't take long for his fur coat to get soaked. Once his hair is wet he'll never head for his burrow. He'll stay ahead of the dogs until they lose him or you come up with a lucky shot. In slightly wet weather, scenting conditions usually are ideal.

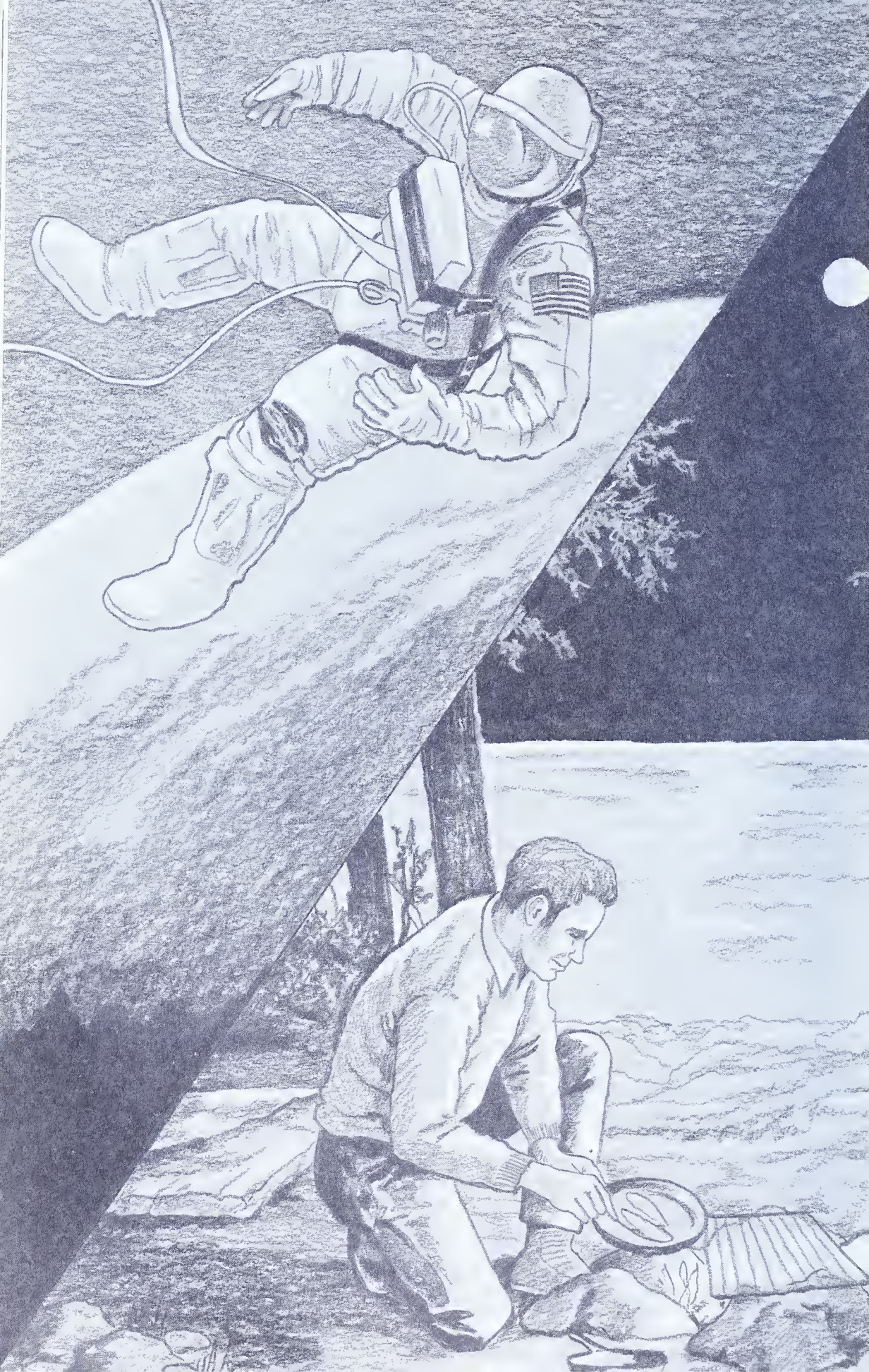
### Picked Up Tempo

Barbarian picked up the tempo of the next chase. It circled for 40 minutes before making the mistake of coming too close to my gun. But the hounds were quiet for only minutes. Soon there was the scent of another cottontail to augment that of the one just bagged. What music!

None of us took our limit of four bunnies, but this was certainly a day long remembered for hound songs. One chase followed another, and numerous quick shots at fleeting, tough targets were offered. We all brought home some meat for the table, and it was a challenging, satisfying hunt for Pennsylvania's number one small game animal.

Rabbit hunting has a special aura about it, doubly so when hunters can find a spot where the cottontails are extra plentiful. The enjoyment can be appreciated by youngsters, oldsters, neophytes, or those with hunting experience all over the world. When you have a quarry that offers excellent shooting sport, a genuine test for rugged hounds, and makes excellent table fare, there is always the probability of an unforgettable day afield. That's what we found when we hunted the old pine plantations of the Christmas-Tree capital of the world.







# Man and Nature

By Mort Levy

**A**NOTHER HUNTING season is upon us, and one evening recently, while preparing for the opening day, my mind leaped back to those days now lost in the remoteness of time when Man, as a species, came into being, and man, as an individual, survived because of his ability as a hunter, a fisherman, a food-gatherer. Because that distant ancestor fitted into nature, as a living part of it, we exist now. A natural flow of thought led me on to comparatively recent times, eras when we perceived ourselves as something apart from nature, something above and superior to it . . . and came perilously close to destroying ourselves in the process.

Though still not out of danger, we are beginning to recognize the problems inherent in this attitude. Many outdoors-oriented persons had seen these problems developing for years, but could not get the ear of the public. It took Rachel Carson to do that, and she did it so well there is some hope that the coming spring and those to follow might yet avoid becoming the silent one she wrote about. Perhaps we will save our waterways and threatened wildlife after all, and maybe, just maybe, our city children will some day experience an odd, unfamiliar substance drifting their way that we old-timers can smugly identify for them as fresh air.

Such are the complacent reflections of a man long addicted to the outdoors and one too self-righteous for his own good. It is when I pause to consider the error of my own ways that I realize the mistake in my non-thinking, for with much shock and guilt I discover that I, who have taken so much and so freely from nature, have given pitifully little in return. Should Mother Nature call me to account, the record I might render in my defense would amount to achievements short

of microscopic. In fact, beyond the few meager dollars my hunting and archery license fees contribute each year to the Game Commission's wildlife management programs, what have I done on behalf of nature that is significant? Ah, yes, five dollars last year to a conservation group. And a bird feeder this past winter. And, yes, the song sparrow whose leg I freed from the maze of television cables running up the brick wall outside my very warm and very comfortable apartment. There it is, one man's repayment for 36 years of continuous pleasure given him by the fields, streams, forests, and wildlife of this state and several others.

## Guilty of Indifference

Therefore, I am forced to conclude and to confess that I am guilty of gross indifference. I have been aware of the necessary role nature plays in making man's life meaningful, yet I have made no effort to transmit this awareness to those in power. I have failed to remember that the more intense one's involvement with the outdoors, the greater one's loss when crimes against nature go unchallenged and unchecked.

Hence, this essay. Because language is my most comfortable weapon, I can think of no better way to atone for past indifference than to put on record what precisely it is that nature means to me. I do so in hopes that other concerned outdoorsmen will find in my words the ammunition they need for a more vocal defense of our natural resources.

For me the greatest reward of the outdoors is that being there always returns a man to a proper perspective of his role in the universe. Man, like all other creatures, is a part of nature, a mere piece of a smoothly running machine called the natural order, but



**SCIENCE MAY GIVE us facts about the eagle, but possessing them are we able to sense the eagle's terrible power, feel its majestic loneliness, or share its freedom?**

this is a fact we tend to submerge beneath the daily pressure swells of a hectic life that has grown increasingly scientific, technological, and urban. We are a conceited lot to boot, quick to forget our proper place in the scheme of things, slow to remember that something which is a part of nature cannot divorce itself from nature—and continue to survive.

The reason we do not remember is that we have ceased to be nature-oriented; the Industrial Revolution, the Nuclear Age, and the Space Age have combined to make us science-oriented instead. Now it is time for us to take a second look, to remember, as the late naturalist John Burroughs wrote, that "the chief interest of mankind in nature or in the universe can never be for any length of time a merely scientific interest." While we

are pleased to have science and technology make life comfortable for us, we must never forget that we need life more than we need science and technology. We can do without  $H_2O$ , but we cannot do without water. And to save our water, we must first learn to value it as we would any other treasure, and a day's venture along a woodland stream will do more to instill that value in us than will any chemist's complicated analysis. Walt Whitman stated it as well as any man:

When I heard the learn'd astronomer,  
When the proofs, the figures, were  
ranged in columns before me . . .  
How soon unaccountable I became tired  
and sick,  
Till rising and gliding out I wander'd  
off by myself,  
In the mystical moist night-air, and from  
time to time,  
Look'd up in perfect silence at the stars.

Whitman, a poet, understood the meaning of Burroughs' gentle warning long before Burroughs ever wrote it. Like Burroughs, like many of us today, he enjoyed a continual love affair with nature, appreciating and savoring every experience she offered, knowing, unlike many of us today, that each experience was vital, not to the pleasure of man, but to his spirit. A poet would know about that because nature, like poetry, appeals to the sentimental, emotional part of us. Man is rational, but he is also romantic; to ignore one or the other is to be only half a man. To nourish both parts is to be whole and fulfilled. True, we might survive without poetry and we could probably carry on without walks in the woods or quiet moments along a clear, dancing stream, but having experienced the poem or the walk we are just that much more alive, just that much more enriched. Man is obligated to live the fullest life possible. A love affair with nature, more than anything else, guarantees his satisfying that obligation. Not to do so is to be left spiritually impoverished.

I mentioned earlier that nature returns a man to a proper perspective



of his role in the universe. Put another way, knowing nature better, we know ourselves better, and in a way that modern science, with all its resources, cannot provide. Science may tell us that the bald eagle belongs to the family *Accipitridae*, that it feeds mainly on dead or dying fish, and that the female is several inches longer than the male, but are such straight facts enough? Possessing them, are we able to *sense* the eagle's terrible power? Can we *feel* its majestic loneliness or share the freedom it possesses when it soars far, far above an earth that grows continually smaller? Science hands us a rational explanation of the eagle, but nature makes the experience meaningful by offering us a peek at the eagle's soul. Nature, when unpolluted, gives us the opportunity to see the eagle in the way that Tennyson did over a century ago.

He clasps the crag with crooked hands;  
Close to the sun in lonely lands,  
Ringed with the azure world, he stands.

The wrinkled sea beneath him crawls;  
He watches from his mountain walls,  
And like a thunderbolt he falls.

I have not seen the bald eagle in Pennsylvania. Too much science and technology drove him far away, and DDT now makes the eggs of his mate too fragile to survive the incubation period. I have been robbed of the eagle, but I have seen with awe the red-tailed hawk circle ever higher above Centre County, and I have watched with fearful admiration the great horned owl pass ghost-like into the dark, marshy woodland above Whipple's Dam, and I do not wish to lose either the hawk or the owl because having seen—no, having *experienced*—them, I know more than ever that what Burroughs wrote is true. "All persons are interested in the live bird and in the live animal, because they dimly read themselves there, or see their own lives rendered in new characters on another plane."

And it's so. Each time I sight a wild turkey moving warily up a mountain-

side, I learn anew the virtue of patience. Each time I watch a whitetail slipping through a sun-speckled glade, I relearn the meaning and desirability of grace. Observing a black ant bury a dead comrade and then resume immediately, without mourning, the endless task of food gathering, I realize



**I HAVE BEEN** robbed of the eagle, but I have seen with awe the red-tailed hawk circle ever higher above Centre County, and I have watched the great horned owl pass ghost-like in the night.

more keenly than ever the simple truth that death affects only the living.

I learn from nature, and I want the lessons to go on. I want my children to benefit from similar teachers. I want nature to survive. I don't care a whit whether or not science hands my son and daughter a jumble of facts about the eagle; it is not important to me that my children understand the eagle. What does matter is that they be able to experience it. What I do want is that, as they grow up, there be great forests and clean rivers and plentiful species of wildlife to continually remind them, and their children's children after them, that people are not apart from nature, but

rather a part—just *one* part—of it. I want them to be ever mindful that, as Sherwood Anderson put it, there is a “bigness outside themselves.”

That bigness is nature, and the most important lesson she teaches is that we must save her if we are to save ourselves. To do so, we must do away with the false notion that nature was made for man, a myth which has misled too many foolish people already into believing that they can endlessly ravish the land for profit, paying back with nothing but polluted water and heaps of industrial waste. We must constantly remember that while nature can survive without science and technology, science and technology cannot survive without nature, that man as a scientist or engineer must never be allowed to grow more important than man as Man.

Fortunately, more and more scientists have begun to recognize these truths, are realizing at last that there is something beyond man which must be tendered greater respect if we are to wind up respecting ourselves when the next decade rolls around. No better illustration of this belated recognition can be given than that of the flights to the moon. Science and technology hurtled men hundreds of thou-

sands of miles into space; there has been no greater scientific feat, but it was not science that our astronauts hailed when they orbited the moon, but Genesis—the birth of nature. Furthermore, when witnessing the eternal beauty of nature from far out in space, the astronauts had no trouble in feeling insignificant. Far removed from this tiny planet, they saw and felt easily the little role which man, despite his brilliance, plays in the great Natural Order.

What is ironic is that this discovery required great minds of science, years of research, and a multi-million dollar rocket; whereas, as any outdoorsman knows, the same experience could have been achieved at the nearest deer stand, along any trout stream, or beside a tiny campfire. This is the truth that every concerned outdoorsman must now aim at making every indifferent legislator and citizen see clearly. Not only is it the least we owe nature, but, in view of the monstrous threat of absolute destruction facing all our natural resources, it is also the greatest favor that we can do for her. To hesitate now will be to lose it all later. The price of such indifference is greater than any one of us can afford.

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## Pennsylvania Hunting License Sales Still Lead U.S.

Pennsylvania's sales of hunting licenses continue to lead the nation, according to the latest figures available from the U.S. Department of the Interior. In 1970-71, the Keystone State had 1,166,634 paid hunting license holders, an all-time record. A paid license holder is one individual, regardless of the number of licenses he may purchase. Following Pennsylvania were Michigan, 941,426; Texas, 795,446; California, 756,975; and New York, 756,060.

Sales of all kinds of licenses to Pennsylvania resident hunters totaled 1,573,943. Following Pennsylvania in this category were California, 1,440,097; New York, 1,298,699; Michigan, 1,276,430; and Texas, 995,949.

Pennsylvania's sale of licenses to nonresident hunters totaled 109,779. Wyoming sold 150,964, but this included multiple licenses sold for individual game species, and is not an accurate indication of the number of nonresident hunters. Following Pennsylvania and Wyoming in nonresident license sales were Montana, 108,489; Colorado, 78,290; and Idaho, 68,383.

Total hunting license sales stacked up like this: Pennsylvania, 1,683,722; California, 1,442,571; New York, 1,331,414; Michigan, 1,299,768; and Texas, 1,010,794.



# Age and Sex Determination of Game Birds

By Donald Zimmerman

Wildlife Conservation Education Specialist

**L**AST FALL several hundred Pennsylvania hunters cooperated in dove, woodcock, pheasant, turkey and waterfowl studies by returning wings from the birds they harvested. In addition, they supplied information on when and where the birds were taken.

Why were these wings needed? What can be learned from them? No doubt these and many more questions puzzled the sportsmen who cooperated in these studies and those who read the notices of them in GAME NEWS. This article is intended to answer these questions.

The techniques used are basic to wildlife research and management. Knowing the percentage of adults versus juveniles (immature or young of the year), and males versus females is essential to understanding the life history, ecology, and management of a species. This information can be used to determine population turnover, reproductive success, and trends of a game population. Such data is vital to the management of a species for it can be used to determine the harvestable surplus—the number of individuals which can be removed from a population without having a detrimental impact on that population.

For small game birds such as pheasants and bobwhite quail, a normal fall population usually contains 70 to 90 juvenile birds in every 100 sampled. Knowing the characteristics of the previous years' populations and sampling the fall population gives the wildlife manager a picture of that year's reproduction, the general condition and changes in the population. For most small game populations, 70 to 90 juveniles per 100 adults represents a year of good natural reproduction, while a 50-50 ratio might indicate a year of poor natural reproduction. The young-to-adult ratio also is indic-



*Photo by Leonard Lee Rue, III*

**IT'S EASY FOR** the hunter to tell the sex of pheasants, compared to other gamebirds, but the data in his article will be helpful for other species found in Pennsylvania also.

ative of the high natural mortality of small game populations. In most years, out of every 100 individuals, 70 to 90 will not live to be a year old.

Through years of research wildlife managers have learned that a high natural mortality rate is normal whether the population is hunted or not. Individuals die from predation, disease, starvation, exposure to severe weather, accidents and other factors. Since the percentage of adults and young in a healthy population varies from species to species, wildlife managers must understand the population characteristics of each species. By knowing those characteristics and the

Table A

Development of Primary Feathers of the Wing with Age, in Days, in Immature Birds

Species	Primary number (A = begins growth; B = fully grown)																Authority				
	1		2		3		4		5		6		7		8			9		10	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B		A	B	A	B
Ruffed Grouse	14	45	20	49	27	63	35	68	42	77	49	83	61	98	74	119	Juvenal not replaced				Bump et al. 1947
Bobwhite	26-30	54-58	33-37	56-60	40-44	60-64	44-50	70-76	52-58	81-89	58-62	99-107	69-77	120-128	97-105	146-154	Juvenal not replaced				Petrides and Nestler 1943
Mourning <sup>o</sup> Dove	25 ±4	30 ±4	37 ±5	45 ±6	54 ±8	66 ±10	80 ±14	96 ±16	117 ±18	142 ±20									Swank 1955		

<sup>o</sup> Figures in column A represent age at which the juvenal feather is dropped. The second figure represents one standard deviation.

NOTE: No reliable method of aging pheasants by feather replacement is known at this time.

current conditions, the wildlife manager can then establish seasons and bag limits that will not be detrimental to that population.

Before the data could be collected, techniques had to be found to determine the age and sex of an individual in the field. After years of research, biologists have learned characteristics for field use. Most are based on coloration, shape, form and feather replacement, leg and bill characteristics, and droppings. Some are easily learned while other techniques require special training and practice to become proficient.

### Some Don't Conform

Sportsmen who might try their hand at determining the age or sex of birds in their bag are cautioned that there are a few individuals in a population that will not exhibit the characteristics illustrated in this article. Conclusions can be drawn about a game population only after a sufficiently large sample of individuals is examined and studied. Furthermore, interpretations from the age and sex composition of a sample are best left to professionally trained wildlife managers.

Though this article is limited to techniques applicable to gallinaceous upland game birds, woodcock and doves, there are other techniques to determine the age and sex of waterfowl, small game animals, big game animals, and furbearers. Many of these techniques require special training, laboratory procedures and practice.

Plumage is the characteristic most generally useful to the hunter in determining age and sex of the birds we're dealing with here, but before we discuss it in relation to the various species, a brief look at the general biology of feather replacement is in order.

Upon hatching, the chicks of gallinaceous birds are covered with a natal down. Usually within days this down is replaced by juvenile plumage. During the late summer or early fall, the birds, depending upon the species,



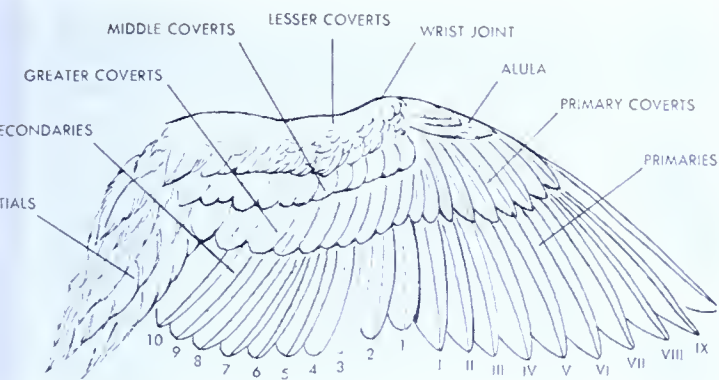


FIG. 1—Nomenclature and position of numbered feathers of a typical wing.



FIG. 3—Pheasant spurs, above, adult at top, immature below. FIG. 6—Dropping configurations below are indicators of sex for the Eastern wild turkey, female above, male below.

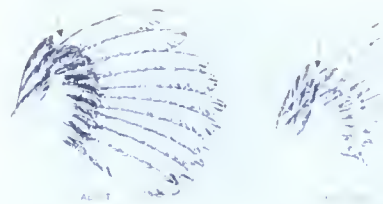


FIG. 2—Age criteria of quail based on wing characters. Primary coverts of adult, left, are of uniform color; tips are light color on immature birds.



FIG. 4—No. 10 primaries of immature Eastern wild turkey, left above, adult at right. FIG. 5—Differences in tail, breast feathers and feet, below.



WOODCOCK SEX AND AGE CRITERIA

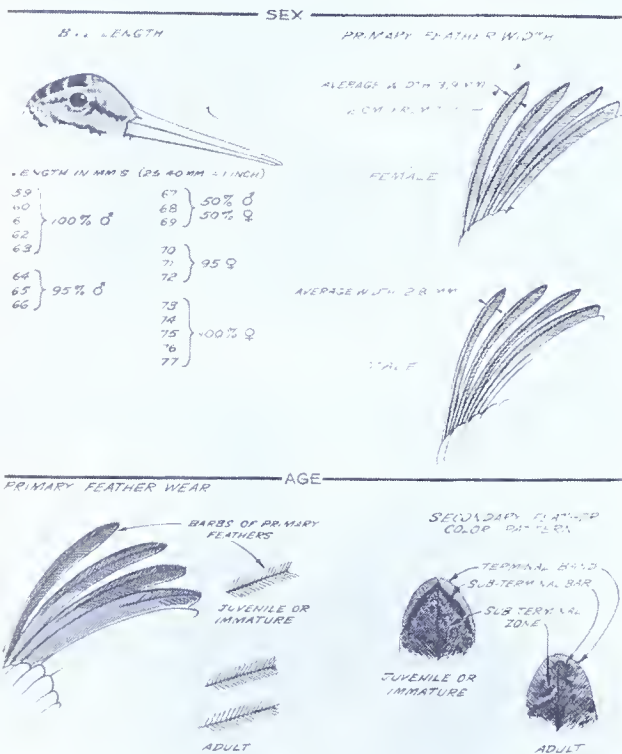


FIG. 7 at top and FIG. 8, above, show details which indicate sex and age of woodcock. Note that birds with shorter bills are males.

molt either totally or partially, acquiring their first winter's plumage. Late in the winter or in early spring, they molt again and develop breeding plumage. Thereafter, most species molt twice a year—a partial molt prior to the breeding season and a complete molt after the breeding season. Feather characteristics, replacement and wear are ways in which juvenile (immature or young of the year) birds can be distinguished from adults (individuals a year or more old and capable of breeding).

Most characteristics vary among species; some, however, can be applied to several species. To distinguish immature birds from adults, review the characteristics given under each species. The age in days of immature birds can be estimated by examining

the replacement and growth of the primary wing feathers. For ringnecked pheasants, ruffed grouse, bobwhite quail and mourning doves, see Figure 1 and Table A. Count backwards from the outermost primary, number X, rather than forward from the innermost, because it is sometimes difficult to distinguish the primary I feather from the secondary 1.

Bobwhite Quail

Adult bobwhite quail usually have uniform gray coverts, while juvenile birds have buff-tipped coverts (Figures 1 and 2). The age in days of juvenile birds can be determined by examination of the replacement and length of primary feathers (Table A and Figure 1). Male bobwhite quail have a white bib and eye stripe; females have a buff to rusty brown bib and eye stripe.

Ringnecked Pheasant

Fall-shot male ringnecked pheasants can be separated into adults and juveniles based on spur size, shape and coloration. Adults have blackish, sharply pointed glossy spurs, usually 23mm or greater from the front of the "shin" to the tip, while the spurs of immature birds are usually less than 23mm, not as dark, obtusely pointed and have a dull lustreless surface (Figure 3). The spurs of adults cannot be scratched by a thumbnail, while juvenile spurs are soft and can be scratched or visibly marked this way. Cockbirds are easily distinguished from hens by their striking colors—black-marked bronze body feathers, iridescent greenish-black heads with scarlet cheek patches, and the white ring around the neck which gives them their name. Hens are a

Figures 1, 2, 3, 4, 5, 6 and the table with this article are from *Wildlife Management Techniques*, edited by Robert H. Jiles, Jr., and published by The Wildlife Society, 3900 Wisconsin Ave., Washington, D.C. 1969. Permission for their use is gratefully acknowledged.



drab brown or tan color with some darker markings.

(23 mm is just less than an inch.)

#### Ruffed Grouse

Primaries IX and X are more pointed than primaries I through VIII on immature grouse, while primaries VIII, IX and X of adults are rounded. To determine the sex, pluck a central tail feather from the grouse, being sure not to break the feather. For males the central tail feather measures 15cm or longer and has a solid blackish bar; for females the central tail feather is less than 15cm and lacks the solid bar.

(15 cm is about 5¾ inches.)

#### Mourning Dove

Male doves have an iridescent metallic to purplish bronze tint on their necks; females lack this coloration. The coverts of adults are a uniform grayish brown while those of juveniles have buff to creamish tips. (The technique is very similar to that used to distinguish juveniles from mature bobwhite quail).

#### Turkey

Primary X of juvenile turkeys is sharply pointed and a uniform gray; those of adults are rounded and distinctly barred (Figure 4). Males or gobblers have squarish, black-tipped breast feathers, while females have more rounded and buff-tipped breast feathers. The male's foot is about 6 inches long with a spur; the female's is about 4½ inches long and lacks the spur (Figure 5).

Droppings (feces) often reveal the sex of turkeys frequenting the area. The droppings of males are cylindrical and those of females are more globular (Figure 6).

Pennsylvania Game Commission

#### Don't Leave Bottles in Woods

In addition to unsightliness and littering, bottles are bad news in the woods. They focus sunlight which can start forest fires. Lighted cigarettes may trigger a blaze, if conditions are right, but bottles are long-lasting and a constant menace. Take them home with you.

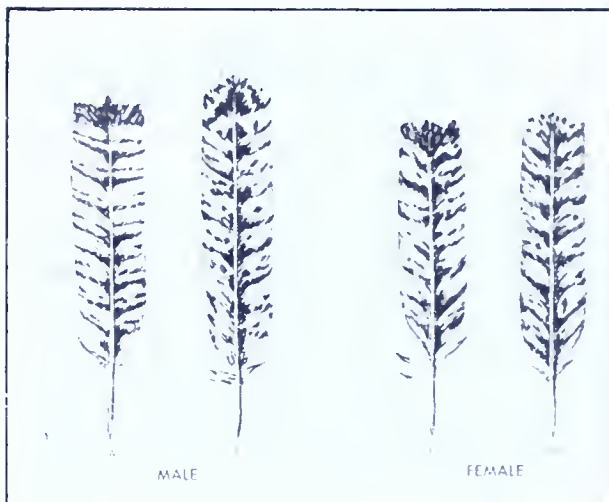


FIG. 9—Central tail feathers of male ruffed grouse are longer than female's, have complete bands, while those of female are incomplete.

turkey biologists found that primary feather X on 20-28 week old wild females had a length range of 7.32 to 8.64 inches with a mean (average) length of nearly 8 inches (7.98) while primary X of the 20-28 week old wild males ranged from 8.5 to 9.5 inches with a mean length of 9 inches.

#### Woodcock

Male woodcock can be distinguished from females by the bill length and average width of the number X primary feather (Figure 7). Juvenile birds can be separated from adults by the examination of the barbs of number X primary wing feather and the color pattern of the secondary feathers (Figure 8).

#### Conclusion

Though by no means complete, these techniques are among the tools that enable wildlife managers to study game populations and to provide management guidelines based on sound biological principles.

# Ringnecks in the Stubble

By Archibald Rutledge



**I**T IS ONE thing to hunt in a strange country and to find strange game; it is an entirely different matter to hunt in familiar territory and run across something in the way of game that you never saw there before—there or anywhere else outside of an aviary. The feeling it gives one is a thriller, making a man feel as he probably would if, when following reedies in the Hackensaek marshes, he should flush a wild gobbler. I experienced the emotion one autumn

quite a few years ago, and there was a mighty cheerful kiek to it.

The Game Commission had been, for some years, liberating ring-necked pheasants in those counties supposed to offer the most congenial conditions for their survival and increase. My home county, Franklin, in the extreme southern part of the state, got some of them. The first of November of that year opened the season on these birds, but as very few had been reported in our vicinity, I had small hope of being allowed the privilege of saluting any of them. My mind was completely on quail.

## A Favorite Stretch

It was a misty afternoon, and the only wind was an occasional fitful and rainy swish that shook all the rain-drops on the trees down on a man's head. But all day long I had been thinking how my dog would work in the stubble. Quail are likely to be restless on such a day, and a good dog can follow them to perfection. But it was two o'clock in the afternoon before I could jump the traces of work and take to the open. I was alone, preferring that kind of hunting to any other—except when an old-tried comrade can be with me. A run of three miles back into a valley that withdrew from the farmlands, famous in this part of the country because of their richness, brought me to a favorite stretch of land that I had permission to hunt. As viewed from the road it showed an old pasture thickly grown in blackberry canes, then a briared gulley with a small stream in it, then an immense field of wheat stubble, golden against the blue mountains to the westward. Clumps of woods rose here and there. It always looked birdy to me. Water, stubble, woods, briar patches, dusting-places in the gulley—what more would quail want? And I



was after quail. I just happened on the ringnecks.

Leaving the car along the road, my dog and I started up the briared gulley. Before long, several cottontails has compelled me to hail them. They were strangers and I took them in before entering the big stubblefield.

Now, I do not want to describe this little hunt as if I were the original finder of ringnecks, for I realize there are many good hunters to whom the experience must be rather familiar. But perhaps I can tell the thing in a new way, and mayhap some of the details will be different; for hunting is like a game of chess; you can't play any two games all the way through in exactly the same way.

When about 200 yards into the golden-brown stubble, my dog, a wide-ranging pointer, began to behave in the way that makes a hunter feel that the joy bells are going to ring for him very soon. But clearly the dog was puzzled. I thought, of course, that he was on the track of a covey of quail. But on a damp afternoon, with just the right wind moving, he should have gone straight to the target. Quail do not usually run much in stubble, but evidently these birds were different. We followed the track more swiftly than I care to follow a game trail, and ere long reached the crest of the great hill whose sides were clothed in the stubble. As far as I could see, not a farmhouse was visible. Oh, what a grand and glorious feeling, when hunting in a civilized community, to feel that no one is close!

### Old Flyers Envious

My dog worked on; he drew to a point a hundred yards from me. I moved down. So did he. Then my eyes were opened and a great light dawned upon me — I think that's the way to say it. For out of the short stubble ahead of the dog there arose an old cock ringneck. He made a lot of noise with his wings and with his voice, and his manner of going would have made Immelmann and Gynemer and those

other great old flyers envious. I watched him until my eyes got tired. Off that hill and down across innumerable other fields he fled. He was smart at this fledding business, or sledding, or whatever you care to call it. I did not see him come to ground. He simply faded away in the distance. And I did not follow; for one of the fields over which he had planed on those mighty wings of his was ploughed. But though I did not follow, I thought hard—which is often what a hunter does when a great chance escapes him. I thought this: that cock pheasant is no solitary bird. So I called to my dog and we began a long circle of the field.

### A Sure Point

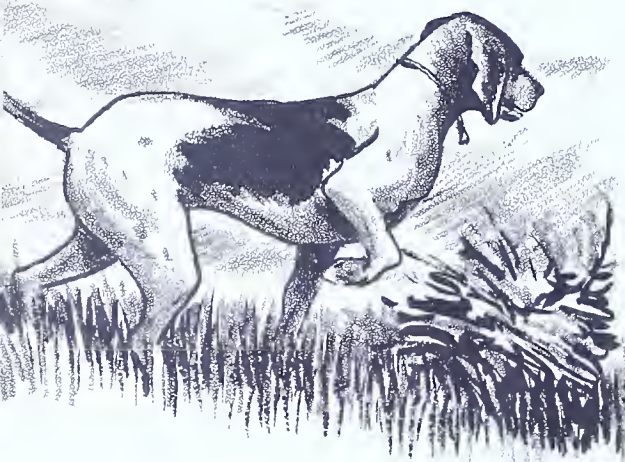
Perhaps 300 yards from where this pheasant flushed, my dog drew to a sure point. I approached, thinking another cottontail would appear. But no cottontail crouched in the stubble could I see. Yet my dog claimed carn-



WE FOLLOWED THE track more swiftly than I like. Then a great light dawned on me. Out of the short stubble rose an old cock ringneck.

estly that something was there. I looked and then I looked some more. At the end of the some-more gaze, I saw the object of the pointer's attention. It was another big pheasant—and not six feet away from me.

The rest is easily told. I can only say that such a bird is almost too big



**PERHAPS 300 YARDS** from where the pheasant flushed, my dog drew to a sure point. It was another pheasant—not six feet away.

to shoot in open country. If a hunter is close on him when he flushes, he has little chance of escape, and I think that all game should have a show at getting away.

However, I first shot the bird and then, having bagged him, I considered what a poor chance he'd had. Hunters are human and they like to take home something. I have always thought that there's something pretty guileful about fellows who say, "Oh, it doesn't matter what we get. It's getting out in the open that we like." For my part, I haven't climbed into that sublimated class as yet, being just a plain hunter who does not care about telling hard-

luck stories and looking like a four-flushing piker when his family greets him on his return from the woods and fields.

Considering the behavior of these two pheasants in the wheat stubble, I am certain that the first one had run a half mile ahead of the dog, whereas the second one had not run at all. Each had chosen his way of eluding danger, and one guessed wrong.

The next half hour in the stubble gave me another rabbit. The expected quail were found on the edge of a thicket, and several were taken—though not all I shot at. It is not easy when the light is foggy and the game goes whirring at cubist and futurist angles over the high briars and scrub locusts. It was now nearly dark, and I turned back toward the car.

Passing down the briared gulley, I came to a haw tree, red with its autumn fruit. It seemed a good place to cross the water. As I stooped under the first fringe of thorny boughs, there was a mighty whirr from the other side of the tree, and another big ring-neck went rocketing off over my head. Had the bird been a grouse, I do not believe I could have stopped him. But my left barrel, having a good reach, brought him down. Perhaps the dampness of the atmosphere prevented his getting all his cylinders to working; I have frequently observed that quail fly less swiftly and with a kind of muffled flight on such days as this one which I have described.

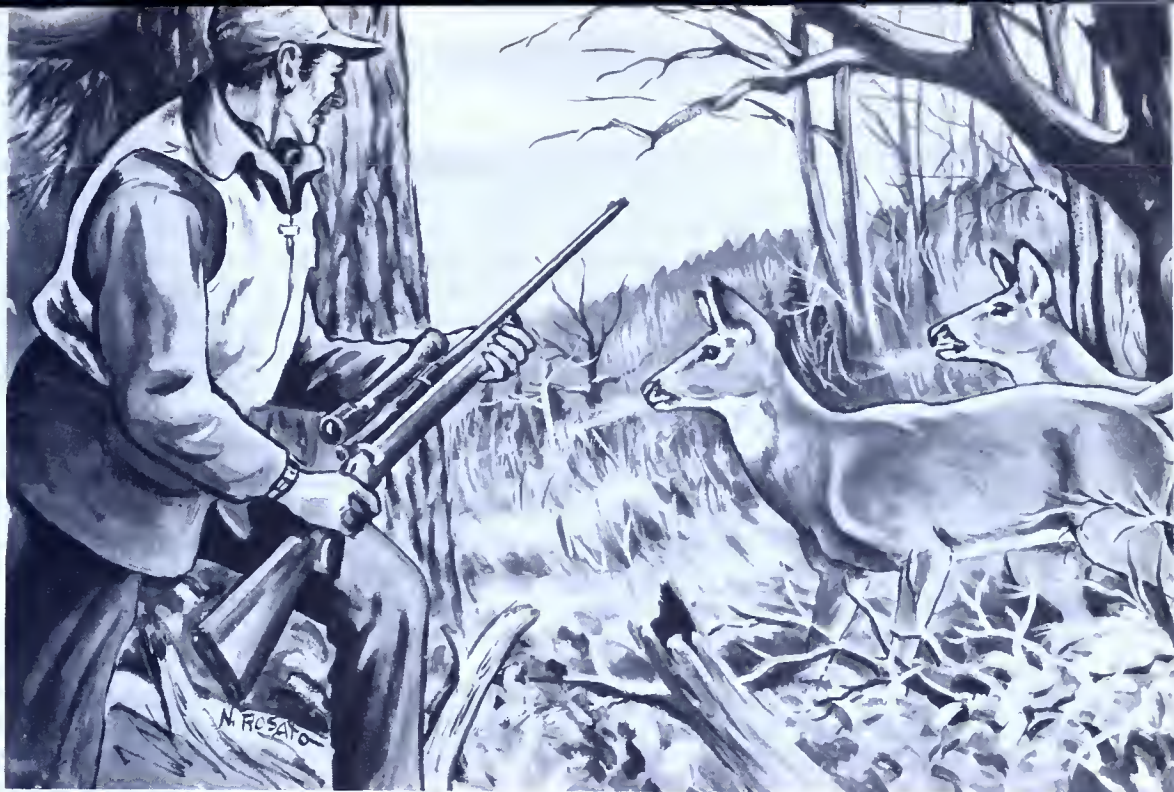
It was about dark when my pointer snuggled down beside me in the car, and all the lights of the village were shining mistily when we drove into town. All in all, it had been a fine day, but it was the ringnecks in the stubble that made it unique for me.

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### *Cure for Car-Chasers*

You can cure a car-chasing dog by squirting him with a water pistol loaded with dilute ammonia. He'll get the word fast, usually in no more than two lessons. The ammonia won't hurt him, and it may save his life, for car-chasers usually wind up dead.





If You and Your Buddies Have Ever Frozen for Hours on Deer Stands, Waiting and Hoping for a Buck to Come Along, You'll Be Glad to Hear About a New Hunting Method . . .

## The Moving Stand

By William D. Carlson

**T**HE YEARLING doe stretched her neck to look down the trail from which she had come. Her ears were cupped to catch any sound and her nose tested the air. The vapor from her heavy breathing dispersed in the crisp forest air. A larger doe, probably her mother, approached, her tail half erect. She nudged her offspring on the rump, signaling her to move out; this was not the place for them. They were as smooth and silent as eagles as they moved through the scrub oak and disappeared over the crest of the hill.

As I lowered my rifle, a chill swept over me. In spite of my efforts to remain motionless, I shivered violently. The temperature had fallen to  $-3^{\circ}$  the night before. When we left the house before 5:00 a.m. it had risen to zero. The frost was thick on the frozen gray branches and even now, hours later, the sun showed no signs

of helping matters any. The whole forest looked brittle. The trees were towers of ice. I pictured them splitting, falling to the ground and shattering. It was one of the coldest opening days I could remember. And because of the cold, that ever present urge every stand hunter experiences—that urge to move—was getting stronger.

I forced myself to watch. I was in a good spot, even though the two does were the only deer I had seen on this stand. Not over 50 yards down the slope from me was a cluster of apple trees. The runway leading to the trees was cut deeply into the side of the hill. Even though all of the apples had long since been consumed, fresh tracks showed that the deer were still using the trail frequently. At any moment my vigil could be rewarded.

As I glanced across the valley to the opposite hillside, however, I spotted a familiar red-suited figure moving

toward the valley, and I knew my time here was over. I pushed aside my coat sleeve and glove to check the time—10 on the nose. Mike was right on schedule. When I stood to limber up, Mike saw me and motioned for me to sit tight. He moved a little farther down the hill, climbed atop a huge rock and meticulously surveyed the valley between us. After a minute he lowered his binoculars and waved me on. I turned and began moving up the hillside toward the ridge and my next stand.

Earlier that fall, four of us had planned to hunt together opening day. All of us are high school teachers; three experienced hunters (at least comparatively speaking) and one rookie. Our school system gives the first day of buck season off each year. This is a real blessing to both students and faculty members who crave the excitement of opening day. When the weather promised to be freezing for Monday, we devised a special plan in an attempt to make our hunt as successful as possible.



**MIKE STARTED** things off by leaving his stand on the hour. When I saw him approaching, I left and routed Jerry. The walking kept us warm, but we always had all stands covered.

Most deer hunters agree that the best method of hunting on the first day, what with the army of men in the woods and deer almost constantly on the move, is to pick a suitable stand and wait. However, with the weather as it was, sitting for a long period of time would be impractical. One would need to travel in order to maintain movable limbs! After some consideration, we devised what we called our “moving stand.” It would combine all the factors needed to make our day a good one.

The locality of our hunt was easy to determine. During turkey season we had found a valley which showed all the signs of a deer hunting paradise. Runs, rubs, and droppings were everywhere. On the Sunday before the season we were in the valley getting things straight for the next day. Our plan was simple enough. Each of us would pick out the best stand he could find, and at dawn, each would be on his own stand. We felt we could survive the chill for an hour, but after that it would be time to move. When we moved, it would be in rotation. Mike would start things off by leaving his stand on the hour. When I saw him approaching my stand, I would leave and rout Jerry. Jerry would move to replace Paul, and Paul would end up at Mike’s stand. It was much like a game of musical chairs. In this manner we could spend the majority of the day sitting and watching, with the good runs covered almost 100% of the time. On our hikes between stands we would warm up and also perhaps do our share to keep the deer moving.

### Stands Marked

Each man marked his own stand to enable him to find it easily in the early morning darkness, and we all spent time at each of the stands familiarizing ourselves with each area and determining from which direction the deer would most likely come. By the end of the day the best routes between stands were established and each of us



knew exactly what to do and where to go.

Throughout this process, the four stands took on nicknames. (When we hunt we have a habit of naming locations. This makes it easier to speak about a certain area.) Paul's home stand was "the orchard" where my story begins. From our access road to the head end of the valley, the orchard is the deepest stand on the right hillside. Closer to the road on the right side two good deer trails intersected, and we called this "the crossroad." Mike located it in heavy scrub oak and laurel. Both runs, one running up and down the hill and the other running across it, were well traveled. He would have his home base here.

### Lightning Slash

My stand, across the valley from the crossroads, overlooked a spring and a good run going into thick pine and laurel. We named this "the spring." Jerry had the deep stand on the left side of the valley where he stood beside a towering pine tree with a huge lightning slash taken out of it. It was affectionately known as "Wetzel's tree." If the four stands were connected with lines, the result would have been a box-like figure. Each stand was approximately 10 to 15 minutes' stalking distance from the next one. Our system looked good.

My story began as I was leaving the orchard and heading across the ridge top toward the crossroads, my fourth stand of the morning. As I moved I felt the refreshing warmth of blood reclaiming my toes and fingers. I watched for fresh tracks in the powdery snow and surveyed the cover ahead. I walked slowly, hunting hard, but, with a slight breeze at my back, I had little hope of jumping a deer. Then I remembered. Just before those two does had come up out of the orchard past me, I heard a shot coming from the direction of the crossroads where I was heading. Perhaps Jerry had his buck. I quickened my

### Moving?

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pace, now somewhat hopeful and excited.

As I came up on the stand I spotted Jerry wiping his hands on the lucky towel he carries with him. When he saw me a huge grin appeared on his face and he raised his right arm in victory. Sure enough, on the ground in front of him lay a fat 4-pointer. When we examined the tracks we found that the buck had been alone and apparently heading right for Jerry's stand. We found a spot where it had stopped and stood a long time, pawing around. We figured it wined Jerry from this spot because here its tracks left the run and it appeared as if the deer was trying to circle around the top of the hill. Since it had been nearly time to change stands, Jerry stood up to shake off the cold and his sudden movement alarmed the deer, about 40 yards away, causing him to flash his tail. Jerry dropped him with one shot. Had Jerry not moved, the deer would have sneaked past without being seen.

We had an agreement that if one man didn't show at the stand where he belonged, the man already there would backtrack to see what happened to him. Five minutes later, as expected, Paul trudged across the valley and up the hill to meet us. It took a little longer for Mike, but he eventually arrived and the four of us started the relatively short drag out to the car.

After Jerry's deer was hung to cool, we celebrated his success with an early lunch of hot soup, sandwiches and candy bars. The food warmed us

considerably and the heater in our car thawed us out completely.

An hour later we left for the afternoon's hunt. We positioned ourselves on the stands so that in the course of moving each would be back at his favorite place for the last hour or so in the day, when deer should be moving to their feeding grounds. The early afternoon was uneventful. The cold didn't let up and I looked forward to each move. The system as a whole seemed to be working. There were no complaints about freezing and we were seeing deer. Jerry had seen at least three deer on each stand, all does, before he shot his 4-point. Paul encountered 11 at the crossroads and jumped several as he walked from stand to stand. Mike saw a nice buck dart briefly in front of him just as he approached Wetzel's tree at 9 o'clock but there was no time for a shot. Six passed my early morning haunt, and I saw four once as I moved to Wetzel's tree. Those plus the two I saw as I left the orchard made 12, but so far for me, no horns.

### Grays and Blacks

Anxious to get back to his favorite crossroads stand before too late in the afternoon, Mike routed me out a half-hour early, and at 3:45 I found myself snuggled against the back of the big oak tree overlooking the spring. A wind had come up and it chilled my face, but with each movement or sound I forgot the cold and strained to catch sight of my quarry. The number of squirrels moving on such a frigid day amazed me. I saw grays and blacks on nearly every stand. A grouse passed by me, pecking occasionally at an exposed leaf or fern. The bird reminded me of a deer being driven. It would stop every dozen feet or so and turn and look back down the hill. I expected something else to come along but the grouse disappeared into the brush and nothing ever showed.

Suddenly a movement far down in the valley caught my attention and

several deer materialized. They were moving in a bunch, picking their way up the trail toward me. Try as I might, I couldn't see any horns. The pounding of my heart subsided and I lowered my rifle. They weren't suspicious and I knew that soon they would be in full view for a good look. I took a deep breath and tried to relax.

### The Group Exploded

It looked as if the deer would pass by within a few yards of me. They were working their way slowly toward me when suddenly at 60 yards the whole group exploded. It was as if someone had thrown a hand grenade among them. Legs, tails and snow flew everywhere. Somehow they regrouped and barreled up the run past me in single file. There were five of them—all does.

During the panic I had jumped to my feet. When I realized the deer were all does, I turned my attention back toward the valley—and found myself staring into the face of a buck. He skidded to a halt just as I caught sight of him. For a moment we both stood frozen. All that moved was the frozen vapor from our breaths. I started my rifle slowly to my shoulder and the buck decided it was time to leave. His ears flopped back behind his rack as he spun and quartered away from me. My first shot echoed up and down the valley, an empty disappointing sound, but at the second the deer tumbled. He was a fine 9-point.

Paul told me later that six deer had passed his stand heading my way, but they were too far away to make out any heads. We assumed they were the same deer I had seen.

Later that evening, discussing our results in front of the fire, we decided to use our moving stand again next year, even if it wasn't cold. We're not sure we were the first to try this method, but we like to say we were because it certainly was successful. We ate venison for months to prove it.



# Outdoor Education at Carlisle

By Wes Bower  
CIA, Southcentral Division

**F**OR MANY YEARS outdoor education has been a nominal part of the educational system in the United States, but with the growing awareness of and concern about ecology and environment, it has now gained a prominent role, especially in the Pennsylvania school systems.

During recent years, many school systems have learned the value of utilizing the knowledge and facilities of various state and federation conservation outdoor-oriented agencies. Some educators have looked still further and found sites suitable for use as outdoor classrooms.

The Carlisle area school system is one of those which recognized this type of training. Starting two years ago under the guidance of Mt. Holly Springs school principal Richard C. Gregor, a program has been developed. It was decided that the fourth grade would be the ideal level to start the experiment. To date, more than 600 fourth-grade students in the ten elementary schools in the Carlisle District have participated in a one-day outdoor education program.

## Camp Shand

The visit to Camp Shand, now a regular school program, lets students spend an entire day outside studying nature's blessings. Plans for the future include a residence overnight program for the fifth grade and later the sixth grade will act as guides and give information. In setting up a day's program, no more than two classes are involved at the same time and students are assigned in groups of ten. Two schools are utilized and frequently the students are mixed. Teachers act only as observers; students from Dickinson College do the explaining and the actual field teaching. This also allows college students an outlook on education and some



*PGC Photo by Wes Bower*

**DGP GENE UTECH and Dick Ocker, a teacher at Crestview Elementary School, instruct students on proper procedure for planting seedlings.**

insight on ways to reach children.

Mr. Gregor has high hopes of a resident program for next year, with students spending three days and two nights at Camp Shand. This year's day-long activities included a film on the outdoors, a lookout over the valleys, a nature walk with explanations about trees and plants, and time at the stream and ponds. Planting seedlings also became a student project.

The youngsters use the facilities at Camp Shand through the courtesy of the Lancaster YMCA board, which owns the facility. Camp Shand is directed by Ted Kleyser, who enthusiastically assisted in the program. From all indications, this program will continue to grow and become a permanent part of the Carlisle area school educational system. Educators unanimously agree that outdoor education gives a better understanding of the environment and an awareness of what surrounds the student.

An Overlooked Tactic  
That Hunters Might Find Useful . . .

## *Island Hopping*

By Bruce Whitman

A TACTIC which helped win a World War in the South Pacific in the 1940s—*island hopping*—can help the small game hunter fill his bag with a mixed variety of Keystone State goodies.

Too often the all-around sportsman overlooks good hunting territory because he has it stereotyped in other categories. For instance, a guy might spend his summer fishing a certain stretch of river and maybe return a few times for ducks when in season. Once small game hunting rolls around, he heads for tall corn country. However, a closer check of those same islands he anchored his boat along while angling could produce some pleasant surprises and outstanding scattergun action.

First, one must select a section of river or large stream dotted with islands. These need not be large or heavily wooded. River islands tend to fool you. Before going ashore, a block-long island may appear to be little more than a hump in the river covered with wild grass and scattered brush. However, closer examination will show dense undergrowth and debris piled up by flood waters. It's this cover which is home to a surprisingly large number of cottontail rabbits and pheasants, both native and those pushed in by heavy hunting pressure in nearby shore areas. Larger islands of several acres or more often offer squirrel hunting and support white-tailed deer populations containing some real trophy racks.

My first island hunt took place some years ago when my brother-in-law invited me to accompany him and a working buddy to a popular Susquehanna River location. The destination was Three Mile Island below Middle-





town, today the site of a nuclear power plant, but then just a tract of mixed woodland, reverted farm land and summer cottages.

I figured Jim's friend had a boat which would get us to the island. I guess I should have known better, for when we picked the guy up that morning he was wearing chest-high waders. My brother-in-law and I had on regular rubber small game boots. We waded out to the island. The Susquehanna was low that fall, but not quite low enough in some places.

Jim and I both ended up with wet feet, but then the rest of us got wet, too, so it made no difference. It was one of those rainy days that always seem to come up when I plan an outdoor activity. But along with getting wet we also got gunning action. By midday we had several nice cottontails field-dressed and a gaudy ring-necked rooster to our credit.

Our bag should have included a pair of woodcock, for we jumped two in separate thickets along the island's shoreline. However, the timberdoodle has never been my strong point, especially not in thick cover when the A. H. Fox double 12 I was shooting at the time caught in every possible vine and branch.

My next island hunts were of a different nature, but just as rewarding. And more important, I didn't have to wade the river to get there.

Ed Crumlich, who knows the Susquehanna in the mid-state neck of the woods as well as anyone and better than most, was the host and chief guide on these trips. Hunting styles varied according to the size of the island and the type of cover. On larger islands the party moved from end to end in skirmish-line fashion. Shorelines choked with brush and debris left from high water were thoroughly stomped. Cottontails jumped inland might cross in front of two or more hunters before making it to cover or ending up in the game bag.

When you came to the end of an

island, usually a point, you had better have that ol' scattergun in the ready position. A rooster taking flight in that situation offers about the same shot as a low claybird going left from the No. 5 position on a trapfield.

More than likely such a ringneck had been shoved out of the island's thick undergrowth and had run in front of the hunters for some distance. Hemmed in by the river on three sides and hunters closing in from the fourth, he was forced to take to the airways.

### Thick Cover

The cover on a river island can be so thick that one hunter might see several birds flush before him while hunting partners a few yards away are screened from the action. In this case the man in the clear will call out "Hen," if the bird is not a legal ringneck, and shoot if it is. At all times, all safety precautions must be observed, of course.

Smaller island patches require a different strategy. Maybe just a few yards wide and a block or less in length, these "grass patches" make up in short but fast action what they lack in size.

In this case, one or two members of the party are dropped off at one end of the island. The others continue by boat to the opposite end. The first two men then "drive" toward their buddies on stand.

Special ground rules are required for these "patch" hunts. Neither drivers nor standers may fire at a target on the ground, to prevent hitting one another. For the same reason, birds taking flight must be well away from the island's shoreline before a shot is taken. Downed birds in the river can quickly be picked up by boat.

This rather unusual type of hunting can produce three small game species for your game bag—rabbits, pheasants and squirrels—plus the bonus of a duck or two every now and then, if in season. Try it.





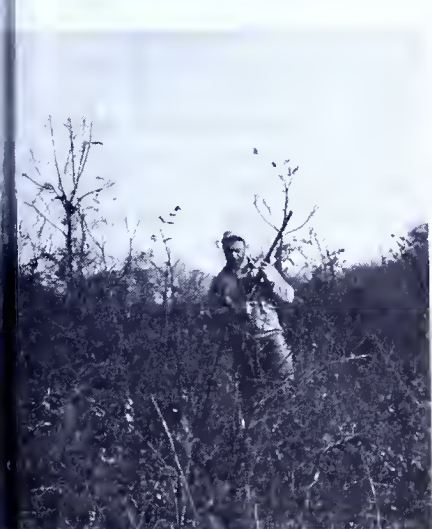
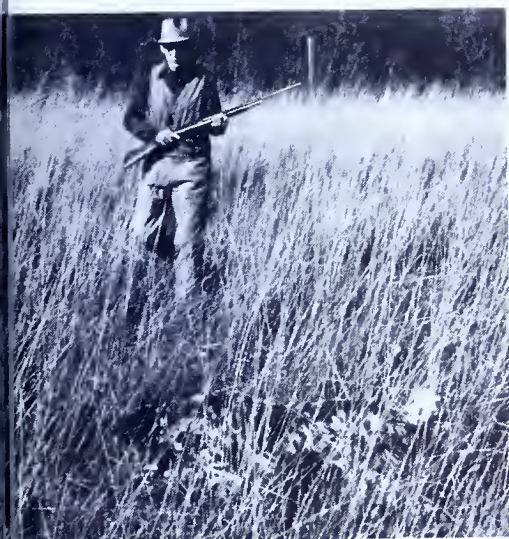
November -







## hunting Month







# FIELD NOTES



## Real Life—a Tough Teacher

**LUZERNE COUNTY**—Five times during the last several years I have had occasion to talk with young people who were trying to camp on State Game Lands. Told that it is not permitted, some became indignant, saying all they wanted was to be free like the animals, without being told what they may or may not do. Little do they realize the strict discipline that wild creatures impose on their young or the consequences that often follow when rules are broken. For instance, on August 15, I saw a pair of bear cubs on a side road in the Thornhurst area. I got out of the car and walked toward the cubs, which were playing. When I was approximately 40 yards from them, mom came out of the brush and told the kids to get going, leading the way across the road and into the woods. The second cub stopped on the bank to look at me again. Mom immediately came back and gave the cub a tremendous clout on the seat that sent him rolling, then they all vanished. Talk about discipline—*wow!* —P-R Area Leader J. A. Booth, Trucksville.

## Understanding Fellow

**ROSS LEFFLER SCHOOL OF CONSERVATION** — On field assignment in Blair County, I met a man who immediately struck up a conversation about the resident hunting license increase. After comparing what Pennsylvania has to offer with that of other states, he said our present fee is a small price to pay for what we have. He further stated he would be willing to pay \$100 a year for a license if he had to! I sincerely hope we never have to pay a price like that for the privilege to hunt, but it certainly is encouraging to know there are sportsmen who realize that providing and maintaining land for hunting is a price we must all be willing to pay if we are going to continue to enjoy hunting as we know it today. —Trainee W. L. Hutson.

## Two Young Cinnamons

**PIKE COUNTY**—This past spring I set a culvert trap to service a bear complaint in Promised Land, Pike County. Several days later I received a call from the lady near whose home we set the trap. She informed me I had a trap full of bears and a tree full of bears beside the trap. She was not exaggerating. Inside the trap was a sow bear and beside the trap was a tree which, as she had stated, was full of bears. There were three cubs up the hemlock tree, waiting for their mother. To add to the unusual event, two of the three cubs were light brown. This was the first report of cinnamon bears in this county. —District Game Protector E. T. Clark. Hawley.



## Showoff

**ROSS LEFFLER SCHOOL OF CONSERVATION**—During my Land Management field assignment I had the opportunity to accompany the District Game Protector on a bear damage complaint. On the way to the farm where the damage had taken place, a man ran out of his yard and motioned for us to stop. He asked what he might do about a dog in the area that has been chasing deer. Before we had a chance to answer, the man pointed to a hillside field across the road and said, "That's the dog sitting there and it will probably chase those deer farther up the hill." The man no sooner finished than the dog got up and chased the deer. That is the most cooperative dog I have ever seen; it almost seemed as if it had waited for an audience.—Trainee G. J. Couillard.

## Unexpected Problem

**DAUPHIN COUNTY**—On two different occasions during this past summer, it was reported that young pheasants were caught in tar that had run off the roads in hot weather and created a "trap" for the young birds. In total, eight pheasants perished this way.—District Game Protector G. W. Packard, Millersburg.

## Part of the Job?

**VENANGO COUNTY**—"There is a strange animal on the road in front of my house and I want it picked up right away," said a woman's voice over the telephone to Deputy McNany during August. Just another telephone call, demanding something from a man who does these jobs without any return payment and often not even a thank you. The strange animal turned out to be a white goat.—District Game Protector L. E. Yocum, Oil City.



## The Longest Night

**BRADFORD COUNTY**—Five Rome area lads had a camping experience they won't soon forget. They had retired for the night when they were disturbed by a strange sound. A flashlight revealed an animal getting into their food supplies. One of the boys yelled, "It's a bobcat!" and seconds later five boys were perched in the top branches of a nearby tree. I understand the boys found it to be a very long night before the sun came up and they came down.—District Game Protector A. D. Rockwell, Sayre.

## Hurt His Feelings

**MERCER COUNTY**—While traveling with John Badger recently, Andy Martin and I were looking through his car, which contains a large supply of reports, handouts, and related matter pertaining to John's work. Andy remarked that the vehicle looked like a mobile litter case. I told Andy that since John travels from one township to another, none of the Law Enforcement agencies can decide who has jurisdiction in the case. Andy and I had a long walk back to our own cars.—District Game Protector B. K. Ray, Sheakleyville.



### Big Family

**SULLIVAN COUNTY**—Several residents of this county have reported sighting a female bear with four cubs this summer.—District Game Protector D. J. Adams, Eagles Mere.

### Some Progress

**FOREST AND WARREN COUNTIES**—I believe that with so much attention being directed toward ecology nowadays, there is a trend away from stocking game birds, etc., toward improving habitat through food and cover plantings for our native game birds and animals. A welcome trend it is.—Land Manager D. W. Gross, Marienville.

### Crowded

**LANCASTER COUNTY** — During the course of a year many injured and abandoned animals are brought to Game Protectors. At one period this month, I had five young rabbits (eyes still closed), a young mallard duck (approximately two weeks old), a fawn (approximately two days old), and an injured cattle egret. Fortunately, Deputy Gable nursed a sick blue heron and a sick American egret at his home so I would have a place to sleep.—District Game Protector R. E. Gosnell, Lancaster.

### Mistaken Belief

**ROSS LEFFLER SCHOOL OF CONSERVATION**—In traveling from the Training School and my home in York County each weekend between March and July, I saw an average of between two and ten dogs running through the fields unaccompanied. I guess there are still many people who feel their pets can't harm wildlife. —Trainee B. L. Warner.

### See The Expert

**BUTLER COUNTY**—I received a call while on vacation to identify a snake that had bitten a local woman. She was quite concerned because she lives in an area that has many masasauga or swamp rattlers. Not content to take the word of the attending physician at the hospital, she came to me. Fortunately it was just an immature blacksnake.—District Game Protector W. N. Weston, Boyers.



### Good Run, No Hit

Living in Clark's Valley on State Game Lands 211, I have an opportunity to listen to some good hounds chasing raccoons. But I can't say as much for the marksmanship of the hunters. To bag the last two coons that were treed, approximately 20 shots were fired.—Land Manager B. D. Jones.



Oooh!

**ERIE COUNTY**—During the routine seasonal contact with one of my safety zone cooperators, I asked if he'd had any difficulties with hunters lately. He replied no, paused, then laughed and said there was one problem but he took care of it himself. It seems a hunter had blocked the farmer's entrance to a rear field, so he backed his manure spreader up to the car and sprayed over a hundred pounds of cow manure over his car. The farmer watched as the individual returned, cleaned his car door lock and window and sheepishly drove away.—District Game Protector A. C. Martin, Erie.

Sir or Madam, as the Case May Be

**MERCER COUNTY**—While conducting a hunter safety program recently, one of my deputies asked a young pupil a question. Upon receiving the answer the deputy complimented the young lady for knowing the correct answer. A young boy then raised his hand. Thinking he had a question, the deputy asked him what it was. His reply, "That young lady who answered the question is no lady—he's a boy." Some days you can't win for losing.—District Game Protector L. P. Heade, Mercer.

### Hope For Future

**ROSS LEFFLER SCHOOL OF CONSERVATION**—As a trainee, I was assigned to Land Manager Bill Griffie for a period of two weeks for instructions pertaining to land management. I found working on the Farm-Game Cooperative Project to be most informative. The majority of landowners I talked with stated that hunters are becoming more considerate and sportsmanlike. With this type of hunter-landowner relationship, we will continue to have lands open for future hunting.—Trainee D. D. Martin.

### A Guy Who Knows

**JEFFERSON COUNTY**—At a recent meeting a well-traveled nonresident sportsman stated that based on his years of experience some states might have more of a specific species of game, but no state is comparable to Pennsylvania in both the variety of game and the hunting opportunities available to the sportsmen. It is observations such as this that give credit to the majority of our sportsmen who support sound management programs.—District Game Protector J. Heider, Brookville.



### No, We Wind Him Up

**VENANGO COUNTY**—The live great horned owl at our county fair wildlife exhibit proved quite an attraction, especially to young people. Our display was interspersed with live and mounted specimens, and unlike the more lively animals the owl would just sit perched in the center of his cage with the movement of his head or an occasional wink being the only signs of life. Two young boys were overheard discussing this phenomenon, and one explained to the other that it had to have a motor or batteries to operate it. The other boy nodded in agreement and they walked away.—District Game Protector L. C. Yahner, Franklin.

## Hot Hunting Tips

**MERCER COUNTY** — I recently spent a weekend in Canada, and while getting gasoline in a back area asked the gas attendant about the hunting. His reply was, "Not so hot, but my buddy and I are going up North where it's good. Alaska, that is." When he heard I was from Pennsylvania, he remarked "Oh, yeah, you have good hunting down there too." (Grass is always greener on the other side of the fence.)—District Game Protector J. Badger, Mercer.

## Fancy Who?

**BERKS COUNTY**—Deputy Southerton received a request for a trap. The complainant said he was over-run with 'fancy heads' and needed help badly. After considerable questioning, Southerton finally was able to determine that the person was having trouble with chipmunks. Neither he nor I had ever heard them called that name before.—District Game Protector J. A. Leindecker, Reading.



## A Real Gang!

**BRADFORD COUNTY** — In response to a damage complaint, Deputy Parsell and I took nine beavers out of one dam. This was done with a live trap in a period of 2½ weeks. This has to be some kind of record for the number of beaver in one dam.—District Game Protector W. A. Bower.

## Talk About Mistaken Identity!

**GREENE COUNTY** — Deputy James Miller of Waynesburg recently received a call from the Waynesburg police saying a woman had reported a small buzzard in her backyard. She said it had flown against her window a number of times. On going to the house, the buzzard was nowhere to be found, but after a check of the area a very large moth was found in a field next to the house. It was a pretty red-tinted moth, and when Deputy Miller showed it to the lady, she identified it as the small buzzard she had called about.—District Game Protector R. J. Askey, Waynesburg.

## Experience Pays—in Everything

**ROSS LEFFLER SCHOOL OF CONSERVATION** — While touring Brady's Lake one day during August, I had chance to talk with a gentleman from Sugar Notch. He had just completed a day of fishing. His creel consisted of one muskellunge and one black bass of size to be noted. The musky measured 38½ inches and the bass weighed approximately 5 pounds. Besides these fine fish, it turned out that this gentleman was 83 years young and was driving a 1928 Ford coupe that he had bought new. — Trainee B. R. Hambley.

## Make A Good Course Better

**INDIANA COUNTY**—The fellows at the Saltsburg Sportsmen's Club, with the help of Deputy Joe Spellane, combined hard work and ingenuity recently to present a fine hunter safety course with a new twist. Students were given a comprehensive 12-hour course over a four-day span. Along with the usual visual aids and lecture, the students had to negotiate an actual obstacle course that had been constructed to simulate obstacles one might find in the hunting field. It made a very realistic setting.—District Game Protector J. E. Deniker, Indiana.





# CONSERVATION NEWS



By Ted Godshall

## Big Game Scoring Sessions Scheduled

**A** MEASURING program for white-tailed deer antlers and black bear skulls will be conducted by the Pennsylvania Game Commission during the spring of 1973. This will be the fifth such program since 1965 for deer antlers, the third for bear skulls. Both trophies will be scored and recorded according to the Boone and Crockett system.

All trophies submitted for measurement must have been taken in Pennsylvania. The following rules govern the program:

1. All racks, including spike bucks, will be measured.
2. Split or repaired skulls will not be accepted.
3. Antlers may not show removed or repaired points.
4. Trophies must have been taken in compliance with the Pennsylvania Game Law.
5. The Pennsylvania Game Commission shall not be responsible for any trophy lost or damaged.
6. The Pennsylvania Game Commission retains the right to reject any entry.
7. Trophies measured in a previous Game Commission contest may not be reentered.
8. All measurements of the judges will be final.
9. Trophies will not be eligible for competition if taken on a licensed propagation area.

Dates for measuring sessions are given below. All locations are in the Game Commission's division offices in the cities listed.

March 17-18: Reading, 10 a.m. to 6 p.m.



*Photo by Thad Bukowski*

**LES HUNTER**, of New Castle, bagged this fine 8-point in Lawrence County last season. It will score well in the program, but small racks are just as welcome at all measuring sessions.

March 30, April 1: Dallas, 10 a.m. to 6 p.m.

April 22: Jersey Shore, 12 noon to 6 p.m.

April 28-29: Franklin, 12 noon to 6 p.m.

April 29: Huntingdon, 12 noon to 6 p.m.

May 6: Ligonier, 10 a.m. to 5 p.m.

Everyone who has a set of whitetail antlers or a bear skull taken according to the rules listed above is urged to bring his trophy in for scoring. Successful bear hunters are urged to remind their taxidermists not to cut the bear's skull during the mounting process, as this ruins it for scoring purposes. Each owner receives a card showing his trophy's score. Full data on all measurements will be maintained at Game Commission headquarters, in a permanent file.

# Stop at a Deer Check Station



**BLAIR YOUNG, RD1, Howard, shows his fine Centre County trophy to Deputy Jim Keller while waiting for a biologist to take data at deer check station.**

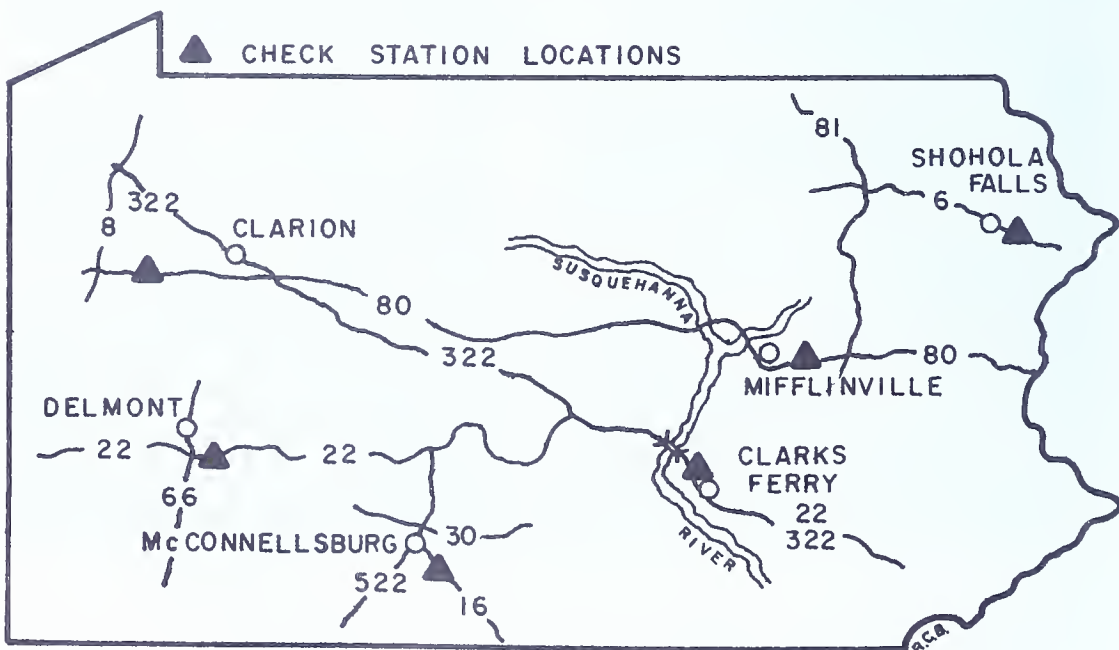
**S**IX DEER CHECK stations will be in operation in Pennsylvania this year, according to Dale E. Sheffer, Chief of the Division of Research.

A great deal of information which is invaluable in improving deer hunting in the state is collected at these stations; therefore, it is hoped that

every successful buck hunter who can stop at a check station will do so. Examination of these deer reveals the conditions of the herd in various regions of the state, the condition of the range, the age structure of the herd, etc. This helps the Game Commission set seasons and bag limits to provide optimum sport for the greatest number of hunters. The check stations will be in operation on the dates listed below at the locations shown:

Three stations will operate from November 27 through December 2—the Northwest station at the rest area of the west bound lane of I-80 just east of the Route 8 exit in Venango County; the Southcentral station north of Harrisburg on Routes 22 and 322 near the east end of the Clarks Ferry Bridge; and a Northeast station at the rest area of the east-bound lane of I-80 near Mifflinville.

Three stations will operate November 27 through November 29—the Southwest station near Delmont along Route 22 east of its intersection with Route 66; a Southcentral station along Route 16 southeast of McConnellsburg near the Fulton-Franklin county line; and a Northeast station in the Shohola Falls Recreation area parking lot along Route 6.





# Storing Smokeless and Black Powders

By Walter N. Heine

Associate Deputy Secretary for Mines and Land Protection  
Department of Environmental Resources

**R**EGULATIONS recently adopted by Pennsylvania's Environmental Quality Board concerning the storage of smokeless powder in commercial establishments are meant to reduce the danger which has been associated with this enterprise, while still allowing stocking of sufficient supplies for practical use.

Although the amount of powder which may be stored by dealers has been increased, additional safety measures will be required when particularly large amounts are involved.

Also, the Division of Quarries and Explosives of the Department of Environmental Resources will be enforcing all the regulations on the storage of both smokeless and black powder more strenuously to provide increased safety for dealers, customers and the general public.

Under the revised regulations, the amount of smokeless powder which may be stored in a commercial establishment is raised from 100 pounds to 200 pounds.

In addition, up to 750 pounds may be stored if the commercial establishment installs DER-approved automatic water sprinkling or foaming devices which are heat-activated and capable of completely inundating the storage facilities.

In commercial establishments, smokeless powder must be stored in wood boxes or cabinets with walls at least one inch thick. No more than 50 pounds is permitted in any one box or cabinet if no fire-control devices are installed. If the special precautions for increased storage capacity are taken, no more than 400 pounds may be kept in any one cabinet.

In either case, storage of smokeless propellants must be away from any flammable substance and sources of open flame, sparks or heat.

Smokeless powder intended for personal use may be stored in residences without permits in quantities of not more than 25 pounds.

A permit from the Department of Environmental Resources is required, however, for storage of between 25 to 50 pounds in a residence.

Although the Environmental Quality Board has not acted on any changes in the regulations governing storage of black sporting powder, it might be good to review the regulations now existing.

Not more than six pounds of black sporting powder is permitted in a residence and not more than 15 pounds is permitted in a commercial establishment.

Black sporting powders are to be stored in commercial establishments in a Class C magazine mounted on wheels for easy removal in case of fire. The magazine must be located near an outside door. The powder may not be displayed.

In residences, black sporting powders must be stored in wood boxes or cabinets equipped with locks and having walls at least one inch thick. They must be located away from flammable substances and sources of open flame, sparks or heat.

Anyone who sells propellants to consumers is required to obtain a permit to sell from the Department.

*This article was written for GAME NEWS to help Pennsylvania's hand-loaders and dealers in smokeless and black powder understand what is required by current regulations in regard to the storage of these propellants. Anyone with questions concerning this subject may write to Mr. Heine at the Department of Environmental Resources, 215 Town House Apartments, Harrisburg, Pa.*



**DGP TED VESLOSKI and Cyril Tuhy coordinate radio information at Civil Defense Headquarters, Blackman Street School, Wilkes-Barre, during flood.**

## *A Voice Over the Waters*

**By Steve Kish**

**CIA, Northeast Division**

**D**URING the week of June 18, 1972, Pennsylvania and New York State were subjected to torrential rains brought up from a warm southern climate by Hurricane Agnes. Waters in the normally gentle but now raging Susquehanna River had been rising progressively for days. However, by Thursday, June 22, the rain had abated somewhat and cresting of the swollen Susquehanna River was expected to be below flood level.

Despite the expectation that the river would begin to stabilize and recede, Pennsylvania Game Commission personnel in the Northeast Division had been alerted and were prepared to assume their responsibilities of serving as radio communications for Civil Defense. Civil Defense some years ago had paid for part of the Game Commission's two-way radio system and the Commission had become a full time partner with Civil Defense in the communications field.

Conservation Officer John Booth

had risen long before dawn on Friday, June 23. After a hasty breakfast he drove to Northeast Division headquarters at Dallas. He activated the powerful headquarters radio at 5:06 a.m. His first communication was with District Game Protector Ted Vesloski and Deputy Ostrowski, who already were on Civil Defense duty in the Wilkes-Barre area and were able to supply John with an on-the-spot report.

### **38 Feet Predicted**

Reports now showed that the raging river had not crested and predicted it would continue to rise and might reach a crest of 38 feet, which was the maximum level the dikes would hold. Booth alerted additional personnel adjacent to the Division Office and in outlying areas, and these officers immediately reported for duty. Contact also was established with Eastern Area Civil Defense headquarters and the Game Commission communications center set up



at Luzerne County Civil Defense headquarters in the court house at Wilkes-Barre.

Vesloski and his staff of deputies already were in action and DGP Tom Wylie soon arrived from the Moscow area with his crew of deputies. Most of the deputies were equipped with two-way radios which they had purchased themselves. As other officers reported in, they were assigned various sectors for communications and operations.

The dikes could no longer hold back the wall of water. They were breached and the waters roared into the boroughs and cities on both sides of the Susquehanna, creating a disaster such as never before experienced in this area. Large sections of Wilkes-Barre, Kingston, Forty Fort, Swoyerville, Plymouth and other towns were inundated. The dikes had been constructed to contain a 38-foot crest. The river eventually crested at 40.6 feet at 6:15 a.m. Saturday morning. Telephone communications were completely disrupted. The only means of communication left was the radio.

Following the initial shock, a network of Civil Defense-Game Commission radio communication centers was established. It was imperative to have radio communications with boat launching areas on the South Street Bridge and Northampton Street. Game Commission radios were quickly set up in these areas and this communication was responsible for the rescue of a number of stranded persons.

### **Airport and Pocono Downs**

Important communication centers also were put into operation at the Wilkes-Barre-Scranton Airport and at Pocono Downs, the delivery points for most of the food and medical supplies which came into the area. A close-working liaison also was set up with the Naval Reserve Unit, Army and Marine Helicopter Units, the Medical Section and other branches of the military and civilian groups.

Civil Defense thus was able to quickly transmit messages concerning rescue work and delivery of supplies, food and other material where needed.

Conditions on both sides of the river were chaotic, yet through the slender voice of radio, some semblance of order was maintained. For example, Colonel Pope and his Marine Corps reserve unit were among the first in Kingston, Forty Fort and adjacent boroughs to begin evacuation and rescue work on the west side of the river. Communication with Civil Defense headquarters was desperately needed. Two portable Game Commission units were dispatched to Colonel Pope and were used effectively during the crisis. Clair Fleeger, supervisor of the Fish Commission's Region II, supplied boats for rescue work and personnel to man the boats. Working through the Game Commission's radio communications with Civil Defense, Pope and Fleeger were able to coordinate their efforts.

In addition to the organized effort in the Wyoming Valley area, game protectors in outlying areas remained on duty and assisted in numerous



**LMO WILL PEOPLES**, Capt. Charles Hogan, Sgt. Shelp and DGP Ed Clark manned radio-equipped Game Commission car at Pocono Downs race track during the extreme emergency.



**DGP CLYDE BURKHOLDER delivered messages from Civil Defense to U.S. Naval Reserve unit to expedite distribution of materials at Wilkes-Barre-Scranton airport.**

fields. Officers in Bradford, Sullivan and Columbia counties and other areas rendered valuable assistance. Some actually engaged in the dangerous work of rescuing people. Land Management Officer William Fulmer assisted a helicopter crew in saving a girl from the swirling waters in the Bloomsburg area. She had been clinging to a tree top for about 14 hours. Others transmitted vital messages to Civil Defense headquarters from isolated cut-off areas.

During the eight days that Game Commission personnel worked around the clock, 50 game protectors, deputies and division office staff members participated in the exhausting effort. Personnel from Susquehanna, Lackawanna, Wayne, Pike, Monroe, Car-

bon, Sullivan, Wyoming and Luzerne Counties all worked long hours willingly. At least nine vital full time communication posts were operating at various times. The mobility of the Game Commission's radio equipment made it possible to transfer these stations to emergency areas at a moment's notice. In addition to fixed communication centers, Game Commission officers used their mobile units and portables to good advantage while transporting refugees, supplies and similar errands of mercy.

Although the Game Commission's well-organized radio system was originally established to protect and preserve our wildlife resources, it was also created, in cooperation with Civil Defense, for the purpose of protecting and preserving our human resources during times of emergency. Numerous times in the past, the Game Commission and Civil Defense have worked together when an emergency existed. However, at this time when disaster struck on such a vast scale and land communications were completely disrupted, one dependable means of communication was the Game Commission-Civil Defense radio system.

The hunters sportsmen of Pennsylvania, in large measure, financed the radio system through payment of hunting license fees, which together with Civil Defense appropriations resulted in an extremely effective radio system. These Pennsylvania sportsmen can feel proud that their contribution was instrumental in alleviating some of the misery caused by the disastrous flood.

### Sample GAME NEWS Copies

*Do you have a friend who is interested in Pennsylvania's outdoors but is not a GAME NEWS subscriber? Perhaps he'd like to see a copy. Send us his name and address and we'll be glad to mail him a free copy of a recent issue of the magazine. Hopefully, we'll get some new subscribers—and maybe your buddy will stop "borrowing" your copies!*





A COOPERATIVE CONSERVATION effort on SGL 214, Crawford County, will utilize two earthen dams to impound 500 acres of water for flood control and recreational purposes. Those present for the groundbreaking included Sen. Bud Dwyer, Crawford Co.; Assemblyman Dave Hayes, Erie Co.; H. T. Hart, Pa. Federation of Sportsmen; L. E. Sheaffer, Supervisor, PGC Northwest Division; H. L. Buchanan, Secretary, Pennsylvania Game Commission; Ray Sickles, PGC Waterfowl Management Agent; and Phil Marley, Chairman, Soil and Water Conservation Commission.

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### Book Review . . .

## Gun Digest, Twenty-Seventh Edition

If there is one thing you can depend on in the shooting field, it's that every edition of the *Gun Digest* is going to be outstanding, the kind of book which is read and re-read, then filed in a handy place with your previous editions to form a permanent reference. There are a number of reasons for this: finding writers who are experts in the various fields of shooting, closely verifying their work for accuracy, blending subject matter to appeal to a wide variety of interests, etc. Editor John Amber is the guy responsible for all this, thus the one who deserves the credit. This year's top offerings include a highly informative report on a new system for measuring gas pressures in a revolver, by Bill Caldwell of Speer, Inc.; Donel Johnson's first-hand comments on iron shot for waterfowlers; George Nonte on high performance handgun loads; Roger Barlow on one-, two-, three-, and four-barrel shotguns; long, highly researched articles on Bergmann system military pistols by James Stewart and the rifles of James Paris Lee by Larry Sterett; and another of his definitive pieces on proof marks by Lee Kennett. There's plenty for hunters, too, and of course the extensive catalog section. As always, this big book is a must for gunners. (*Gun Digest*, 27th edition, ed. by John Amber, Digest Books, Inc., 540 Frontage Road, Northfield, Ill. 60093, 8½x11, paperbound, 480 pp., \$6.95.)

# State Deer Season Outlook Again Good



**MABEL L. LEIDIG, RD 4, Greencastle, with her trophy-size 8-point, 194-lb. buck taken in Tioga County last season. A 243 Sako was used on the hunt.**

**T**HE OUTLOOK for Pennsylvania's 1972 deer season is quite good for hunters. From the biological or game management point of view, the prospect is not quite as good as a year ago, because the herd of white-tails is again growing almost dangerously large, which means there will be additional wear and tear on an already-overbrowsed range and smaller-bodied deer because of local food shortages.

Overall, the range is well stocked, with local and isolated exceptions, and the Game Commission anticipates that hunters will tag more deer in 1972 than the 104,227 they reported in 1971. Reports from field officers indicate that deer are being sighted in large numbers throughout most of the state.

Winter deer mortality was exceptionally light during 1971-72 and 1970-71, again with local exceptions, and

almost inconsequential when compared with losses during the 1969-70 winter, considered a "disaster" by some sportsmen.

Actually, Weather Service records show that the winter of 1969-70 was almost a "normal" winter. It seemed severe because winters before and since have been quite mild. Winter deer losses during 1969-70 were rather normal as well, considering the size of the herd and the shortage of food that year.

Following the 1969-70 winter, heavy pressure was put on the Game Commission by some local hunting groups, demanding that antlerless deer seasons be closed for periods of three to five years. Wildlife managers pointed out that to do so would have resulted in an uncontrollable population explosion.

Game Commission studies show that there are a minimum of 620,000 deer in the state now. This is getting quite close to the size of the 1967 herd, which at 667,000 was the largest number of whitetails in the state in several decades.

Unless there is a large deer harvest this year, there could be heavy winter losses for 1972-73 should severe, prolonged weather conditions develop.

## Big Harvest Needed

Wildlife managers are hopeful that hunters will harvest at least 63,000 bucks this year and another 42,500 antlerless whitetails. Should the harvest fall short of these projections, the deer herd could be in for real trouble should a hard winter follow the hunting seasons.

Last year, hunters reported harvesting 55,602 bucks and 48,625 antlerless deer in Pennsylvania.

Not as many antlerless licenses will be available in 1972 as in 1971. This year there will be 302,230 statewide, some 11,600 fewer than one year ago.

However, the reduced number of



antlerless licenses does not necessarily mean there will be a significant drop in the antlerless deer harvest this year. In the past, it was possible for a hunter to obtain antlerless licenses in more than one county, and a number of hunters did just that. In 1972, a hunter will be able to obtain only one license for antlerless deer, so there will be more hunters afield this year for x number of licenses than there were in the past, and, hopefully, more whitetails should be harvested for x number of licenses than in the past.

Of course, other factors affect the harvest of deer. When there are more hunters, the success ratio rises because there are more sportsmen to stir up wildlife and more shooters for whitetails to encounter. Weather conditions are important. Ice and snow storms prevent deer from moving and keep hunters out of the woods. Warm temperatures are not particularly conducive to a bigger bag. The result under such circumstances is usually fewer whitetails harvested.

Antlerless deer license allocations this year were reduced in 37 counties, increased in 20 counties, and remained unchanged in 9 counties.

In 1957 the Game Commission drew

up its present deer management plan which calls for a sustained annual buck harvest of 35,000 to 40,000 animals. This figure has been exceeded by a wide margin every year since 1962—a bonanza for hunters but the large herd has been a detriment to the range.

A succession of unusually mild winters and underharvested whitetails in the early 1960s led to an explosion of the deer population and required heavy harvesting during the latter half of the decade to bring the herd into line with available food supplies. By last year the herd had reached a relatively manageable point. In order to permit continued recovery of the range, it will be necessary to harvest deer in numbers equaling the size of the 1972 fawn crop. A growing herd can only serve to delay major range improvement.

Ordinarily about one-third of the antlered deer harvest in many northern Pennsylvania counties would be made up of spike bucks. However, the percentage has risen in recent years, and now about half of the harvest is composed of spike bucks. Range conditions (food supplies) are the main reason why hunters have to look so hard to find antlers.

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## Bear Hunters' Help Needed

Successful bear hunters are urged to bring the skulls of their trophies to District Game Protectors. Modern taxidermy methods do not utilize the skull in mounting, but if you wish to keep it, only the tiny pre-molar tooth that will be removed is necessary for aging. The Pennsylvania Wildlife Research Unit will examine the specimen to determine the age structure of Pennsylvania's bears. Studies since 1967 have shown a decline in the average age of bears, and data from this year's harvest is essential for forming an intelligent management plan.

## *Books in Brief . . .*

**Four Wheel Drive Handbook** by James T. Crowe and Cameron A. Warren, 3rd rev. ed., 1972, 96 pp., paperbound, \$2.50. Parkhurst Pub. Co., Newport Beach, Calif. Loads of practical information on 4WD's — driving techniques on and off the road, typical problems encountered with these vehicles and solutions, comments on various makes, etc. — from two guys who have many years of first-hand experience.



*Photo by John Green, Sunbury Daily Item*

**DGP DICK DONAHOE** and Deputy **Bill Levan** had the unhappy chore of picking up the remains of a deer family—a doe and three fawns—killed while trying to cross Rt. 147 near Northumberland. One car reportedly did the damage.



*Photo by Ben Alexander*

**THE Pennsylvania State Outdoor Pistol Championship Match**, sponsored by the **7 Mountains Pistol Club** of State College, was held at the **Scotia Range** in August. **Bob Green**, of **Pittsfield**, shot **2585-94** for the championship.

## Days of Yore



**EARLY IN THIS CENTURY**, the **Sam Miller Camp** on **Stitzer Mountain**, **Union County**, had good luck, as shown here. From left are **John Sheets**, **Harry Walls**, **Samuel Boop**, **Daniel Showalter** (cook), **Ammon Keister** and **Parker Boop**. All were from the **Glen Iron** area and all are now deceased. Photo from **Ernest H. Keister**, of **Lewisburg**, grandson of the one hunter.



# The Old Ways Are Not Always Good Ways

By Les Rountree

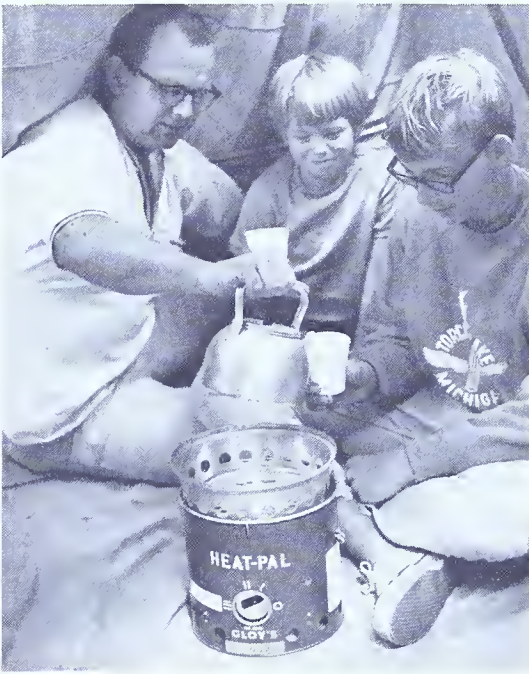
**TOO MANY** primitive fireplaces litter our hiking trails, Rountree feels. He carries a backpacker's stove to do his cooking, believes others should too.

**B**ACK IN THE days of Stewart Edward White and those other camping deans of the early 1900s, there were some standard rules of the woods that were religiously followed. Tents were always trenched, cans were always buried, and huge campfires were always built at night for heat and light. There may still be some slight justification for cutting a trench around a tent in the wilderness but you'd best not try it in a modern campground. The owners don't take kindly to you digging up their campsites and besides your trenches won't fit the next guy's tent anyway. Burying cans has long been taboo and a huge campfire went out with the hula-hoop. At most public campsites there isn't enough wood to spare any-



more, and at private campsites the price of firewood is so high that a small flicker of flame is all most of us can afford. Ah, for the good old days, we say. But do we really mean it?

Let's face it, there are some practices that we can no longer live with if camping in some areas is to be permitted. People who write about outdoor recreation are, in part, responsible for the huge wave of campers that just finished sweeping across the countryside for another year. Some of them haven't quit yet and come next Memorial Day they'll be out in full blast once more . . . only more of them! But the writers alone can't put the gospel of the 20th Century across. Every concerned camper who hits the road must keep talking about it.



DENATURED ALCOHOL stove made by Gloy's, 10 Lewis St., Greenwich, Conn. 06831, also serves as a heater to take away chill on rainy days.

What's the gospel? It's very simple. Just the old-fashioned golden rule, "Do unto others . . ." and consider every place that you set up camp as being the backyard of one of the "others."

Unless you are in a really primitive location and have no other choice, the modern camper should not break boughs for bedding, dig trenches for drainage around tents, dig holes for garbage, cans and other litter, build huge campfires (and in some areas he should not build any campfires at all), move stones, pick flowers or cut trees for firewood. Because of sheer numbers these practices would soon make a shambles of any spot that can be called a camping area. To repeat, there is *some* justification for *some* of these methods in extreme backwoods locations, but the people who find themselves in these spots usually understand the consequences of doing the wrong thing.

Let's take the subject of cans, for instance. In the case of the back-packer there is no reason, practical or

otherwise, for lugging full metal cans on one's back. They are heavy and bulky and dehydrated vegetables contain more nutrition per ounce. If you decide to carry something from a can or jar, transfer it into a lightweight plastic container and bring the plastic back out with you. Jelly, peanut butter, dried soup, sugar and things like melba toast can be carried in plastic bags or reusable plastic containers. I favor reusable vessels since there is nothing left to burn or otherwise dispose of. If you must carry some food in cans, it is a short operation to cut out both ends and flatten the can for easy transportation back out of the boonies. There is a difference in cans too. Aluminum cans are lighter and they open and flatten much easier than do the tin-coated variety. They are also much more valuable for salvage. When you do get back home from any camping trip, don't throw the cans into the garbage container . . . take them to a recycling center and do your bit to help reduce this country's enormous solid waste problem.

### Recycle It

A note about garbage: During the past two years our family of four has been recycling all cans, glass and clean paper. The cans are flattened and packed in cardboard boxes and the paper, including junk mail, newspapers and magazines, is bundled and securely tied. About once a month everything is transported to a collection center. Green, white and brown glass is rinsed, sorted and returned too. All beverages (including milk) are purchased in returnable bottles and the compostable garbage is buried in the garden and flower beds. As a result, we have one small container of garbage each week instead of the three or four giant bags that formerly made up our weekly residue. Anyone can do it, it takes only an extra five minutes each day.

For a quarter-mile around most state and private campgrounds the



loose firewood that once lay on the ground is no longer there. It was picked up years ago. There isn't much you can do for fire material unless you buy it. For obvious reasons, campers can't be permitted to cut their own wood. Buy a small amount of firewood, if you must have a fire, but don't go overboard on it. On certain damp evenings, I have been subjected to a number of man-made smogs that blanketed heavily used campgrounds. On a chilly evening in an area where your fire is under control and other campers are not affected by the smoke, I enjoy a crackling blaze as much as the next guy. But in an area with a hundred other campsites, if half of the campers decide to build a fire at one time, the air pollution is just as annoying as it can be in downtown Manhattan.

For any purpose, keep the fire small enough so that one can easily sidle up to within three feet of it. If it is larger, cooking over the blaze becomes impossible and staying close enough to it to keep warm requires constant shifting to keep from broiling yourself on one side. A good cooking or warming fire requires little attention and only occasional refueling. Once the coals have established themselves, the adding of three or four wrist-size wood chunks will be all that's needed. I have never seen an experienced guide or woodsman build a cook fire that put flames any higher than his belt buckle.

On some campgrounds fires are absolutely forbidden. This regulation is becoming more common each year. In heavily used camping areas there really is little justification for building a fire at all. Most self-contained camping rigs are equipped with a propane or white gas stove and from a practical sense they do a much better job of cooking than will an open fire.

In one sense a fire cuts off the camper from the wildlife surrounding him. Remember the times you have heard the rustling of leaves and wondered just what creature was visiting

... but just couldn't see because the firelight had ruined your night vision? One alternative to a fire is a red light which can not be seen by much wildlife but which enables you to see them. Someday soon, camplight manufacturers will be making shades of yellow or red to fit their lanterns. Until they do, you can fashion your own shade out of red cellophane.

### Carry a Stove

In heavily wooded, remote areas the backpacker should never consider building a fire unless, of course, an emergency situation occurs. He is much better off from a safety and practical standpoint to carry one of the lightweight backpacker stoves. I carry an old GI one-burner gas stove which is a dandy (although a bit heavy). The palm-size, expansion stoves of the Primus-Seivert variety are excellent. If you really want to go light, a can of Sterno will heat soup and coffee adequately.

Even in the boonies I don't think it's acceptable to pick flowers or leaves. In fact, it can be illegal. I know of one campground in north-central Pennsylvania where once a profusion of Lady Slippers flourished. Through bouquet picking for campers' tables and amateur horticulturists digging the plants out for transplanting at home, the beautiful flowers disappeared in a few short years. They'll never come back. Clean campgrounds are nice places but that doesn't mean denuded ones!

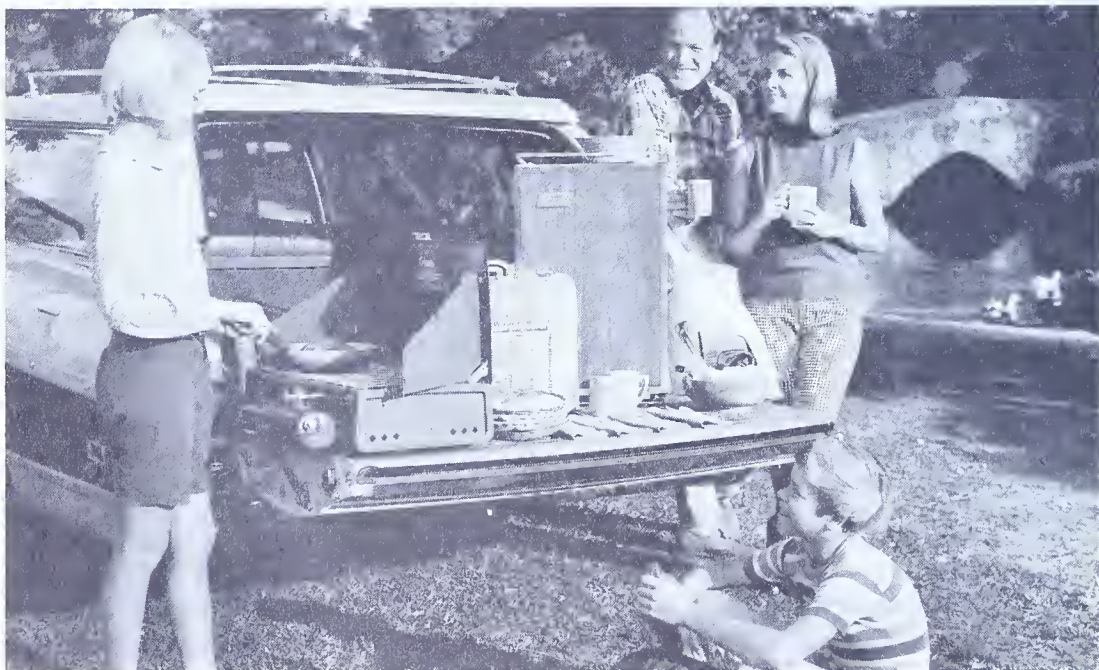
A much better way to record discoveries is to take a picture of the flora in question. A photo lasts much longer than a dried specimen and photography is or should be one of every camper's hobbies. I've mentioned many times in this column that I consider a camera a must on a camping trip. Each individual trip can be recalled at any time through photographs. The newest lightweight cameras, touted as pocket sized, should be great for backpackers who are counting ounces.

Don't move rocks or other natural things to suit your convenience. Mother Nature worked a long time to arrange things to please herself and her arrangement is much more pleasant to look at than most of man's "improvements." And carving initials and other messages on trees—well, I won't even comment on that stupid practice.

Due to the sheer numbers of campers today, the old ways of camping are no longer acceptable. Today's camper cannot cut fresh tent poles every time he establishes a new camp. He's got to carry his retractable aluminum ones with him. In fact, that's the saving grace of modern camping and up-to-date camping equipment. What we carry along with us in self-contained camping units or on our backs can also be carried home again. Leaving a trail of litter, containers and worn-out camping gear is not only passe, it's hardly possible to do unless you really try. The camping days of empty bean cans and hemlock lean-tos are over. Except in emergencies like shipwrecks, airplane crashes and being lost in the middle of the Yukon, there is no justification for cutting, burning, defacing or otherwise

tampering with the outdoor profile. When the self-contained camper pulls away from its parking spot, the only thing it should leave behind is its tire tracks. The tent camper's mark should consist of nothing more than a few holes for tent pegs. The backpacker should leave a record of his passing through a set of footprints—nothing more.

*An Idea For This Fall*—As most of you receive this issue of GAME NEWS, the 1972 hunting season will be upon us. For some extra fun and convenience, take your camp stove along in the trunk of the car when you go out for an all day session in the field. A hot lunch on a chilly November day can be quickly rustled up on the two-burner job and everyone knows that a cup of hot soup along with that cold sandwich is most welcome. Sure you can carry something warm in a Thermos bottle but it adds that extra lift to an all day hunt to take a break and cook a hot hamburger or a minute steak for lunch. Your hunting buddies will be pleasantly surprised and who knows, . . . next time they may volunteer to buy the groceries.







Ethical Conduct Permits the . . .

## Trophy and the Triumph

By Keith C. Schuyler

*Photos from the Author*

**T**HERE WAS A time when a column such as the one to follow would have been unnecessary for bow hunters. Possibly there are those who will feel the same after they read it. They are entitled to their own opinions, but if they are bow hunters, they most certainly should not ignore the implications of what follows.

This is about ethics.

Ethics is defined loosely as a code of moral values. As we sit in between the two 1972 archery seasons for deer, it is a good time to reflect upon how we have played the game to date and how we regard the future. For, upon all of us who enjoy the outdoor sports, there rests a responsibility which transcends the limitations imposed by law. If we do not accept this responsibility, we invite the more restrictive laws which result when any segment of the population cannot or will not govern itself in any activity.

In its infancy within the relatively

short span of modern times, bow hunting was regarded as a novelty by other than participants. Not until 1929 did Pennsylvania make the first breakthrough in the nation and recognize archery as a hunting sport. That year Major Lyn G. Adams, superintendent of the Pennsylvania State Police, and Paul Wilcox, were responsible for introducing a bill into the state legislature to legalize the bow and arrow as a sporting arm for taking game birds and animals. Even so, it was not until 1937 that two areas of the state were set aside solely for the use of bow hunters during the regular deer season. It took another fourteen years before a special deer season was established for archers.

During that span of years, fewer than a dozen deer were taken by bow hunters during the regular antlered deer seasons. One bear was credited to an archer, but the report is cloudy. (This column would appreciate any



SOME WILDLIFE WATCHERS MAY resent seeing bow hunters in areas where they have enjoyed observing deer feed on drives in the evening.

information as to the facts relative to that bear kill report.) Wisconsin actually had the first season exclusively for bow hunters in 1934.

This information is presented chiefly for the benefit of those more recently associated with bow hunting. It took many years before even crumbs from hunting's table were available to archery addicts. Tackle in those early days was still primitive by modern standards, and knowledge about the performance of such tackle was even more archaic. Opening of the special deer season for bow hunters in this state did more to push archery to its present prominence than any other single action in modern times. Currently, Pennsylvania is the greatest hunting state in the union and has the largest number of participants.

Both target archery and bow hunting should continue to boom. The signs are obvious. As the population spreads, more and more acres inevitably will be closed to gun hunting, but in some of these areas the limited power of a bow will not be considered an undue hazard. This, in itself, necessitates a closer look at ourselves and our activities from a safety standpoint as well as a moral approach.

*All types* of hunting are now under fire from misguided do-gooders and outright crackpots. All too frequently, they have lines of communication in the public information media not open to the average hunter. The press, television and radio usually hire people to cover *spectator* events. These harried servants have no time, for the most part, to engage in or to interest themselves in the outdoor sports.

It doesn't seem possible that public opinion can be swayed away from the proven worth of the hunting sports, but there are dangers. Bow hunters, still a minority, are in the greatest danger of losing their privileges.

And, frankly, if a small percentage of them don't shape up, they can hazard the sport for all. Some of these persons are simply ignorant, some are incurably stupid, and others are deliberate cheats. We can, as a group, try to inform the first group, the largest, lead the second, and stomp on the





small minority of those who do the most harm.

Our sins are showing. Although it has been proven there is no significant difference between guns and bows relative to lost game through fatal wounding, unhappy mishaps become much more visible during and after the bow hunting season. In October, the woods are full of hikers, nut pickers and camera fans. The weather is especially conducive to outdoor activities as the population takes a big breath of fresh air before settling down for the winter within the confines of the home or business. A single wounded animal might be seen by many people who, compounded, can produce visual "evidence" that the woods are full of wounded animals.

A hunter too close to buildings or prohibited areas is much more likely to be detected. Even if he is seen dragging out or carrying a properly killed deer, those who regard the out-of-doors theirs for the looking are apt to be offended. Worse, if he is seen hunting in an area where sightseers stop by evenings to watch the deer feed on the farmers' crops, he is not thought of kindly by those with no interest in hunting.

Although hunters, well over one million strong in Pennsylvania, represent a big segment of the population, there are many more non-hunters. And bow hunters represent only about 13 percent of the total hunters.

### Squeezed to a Trickle

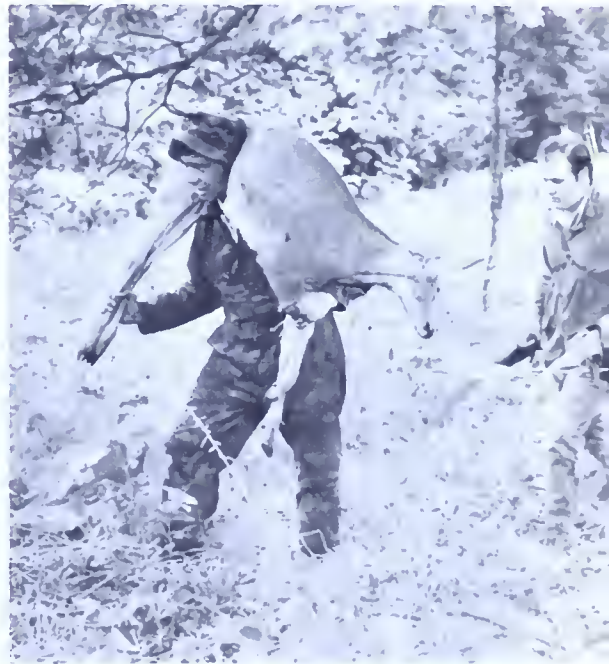
Opposition from gun hunters has been squeezed to a trickle through a long program of statistical proof and general information about bow hunting. It even appears that the sport was sold so well that today the vast majority of bow hunters are those who enjoy archery hunting as an adjunct to hunting with the gun. This has caused some of the problems in bow hunting to which these paragraphs are being addressed. Only those who have become *proficient* with both the gun and the bow are fully aware that each

requires plenty of hard, conscientious practice.

Unfortunately, many excellent riflemen somehow feel their gun skills can quickly be adapted to the bow and arrow. It just isn't true or even possible. Those who stay away from formal competition or the fellowship of organized groups because of embarrassment over lack of proficiency are missing out on two counts. First, they fail to accept the fact that their skills and frequently their tackle do not qualify them as bow hunters. (But they feel that somehow they will be able to score if the circumstances are right.) Secondly, they pass up the opportunity to qualify themselves by avoiding organized archery groups. Yet the majority of these hunters by far would feel extremely bad if they botched a shot at living game.

### Provides Excuse

The same is true of those who play around with archery once a year and expect to score during the hunting seasons. They just want to get out in



JUST SEEING A DEAD deer causes resentment among some non-hunters, even though the animal was taken legitimately and according to sporting ethics.

the woods, and bow hunting provides the excuse. Unfortunately, this is too much like the fellow who takes an extra drink just to be sociable. He is setting himself up to do considerable harm however unintentional it might be.

Some of the things which happen would be downright laughable if the implications were not so pathetic.

### Can't Get Much Power

For example, there is the instance in which a solitary bow hunter was approached by another for a mere exchange of conversation. To the question of how his luck was, the lone hunter replied, "Oh, I've had several shots at deer, but I just can't seem to get much power out of this thing." In an effort to be of help, the other took a look at his bow. It was a beautiful recurve of popular make and of sufficient poundage to do a proper job on deer. However, the bow was strung backwards!

Another time, two tyro archers went out hunting together for the first time with only one bow between them.

They waited until they got into the woods to string it. They then discovered that neither knew how. After fiddling around a while, one of them struck upon an excellent idea to make the chore easy. He suggested that each of them take a limb of the bow and push the handle section against the trunk of a small tree. With their combined strength, the bow bent rather easily, and the string was placed in the nocks at either end of the bow. The only bad part about the deal was that they now had the tree growing between the bow and the string!

And then there was a girl applying for college who had high grades in difficult subjects such as physics and philosophy, but a failing mark in her physical education course. "However did you manage to flunk archery?" the interviewer asked. In a low voice the girl sheepishly replied, "I shot the teacher."

A perfect example of the need to keep our skirts clean to avoid misunderstandings was contained in a "Letter to the Editor" of the Philadel-

**ETHICAL BOW HUNTERS WELCOME** the appearance of officers enforcing the Game Law, such as DGP Ed Sherlinski and Deputy Ed Knecht, here.





phia Inquirer this year. A woman wrote, "... why must heartless, inhumane people shoot arrows into these (deer) creatures. Not only do the arrows not kill nine times out of ten, but they remain in the animals and cruelly torture them as long as they remain alive. Is that sportsmanship!?"

This woman is so uninformed that her remarks do not deserve attention. Yet thousands of people undoubtedly read her nonsense. I wrote a reply but, to my knowledge, it was never published. Even if it had been, how many would have preferred to believe her? How many would have read both opinions?

It is true that a deer can be properly dispatched with a light bow of perhaps 30 pounds. They have been taken with even lighter models. Some companies, to make it easier to sell to those who won't practice sufficiently to handle a proper bow, encourage hunters to use tackle that shouldn't be permitted on the big-game hunting scene. It is a firm opinion here that as heavy a bow as the hunter can develop muscles to handle properly should be used on all big game. It must be remembered that the shooting position, excitement, brush and other factors may cause the hunter to use less than the available power in the bow anyway. Let us at least go equipped to do the best job possible and lessen the possibility of a bad or improper hit.

There are two items in tackle which are permitted by law but which are a matter of common sense and consideration for the quarry we seek.

One is the matter of hunting heads. Although fewer bad ones are on the market now than formerly, there are still some with abrupt or hooked trailing edges which can remain in the animal and turn a superficial hit into a wound which may cause crippling or actual death. It is the continuing belief here that no broadheads should be used on big game which have less than about a 45-degree taper on the trailing edge. Such a head, with shaft

attached, will generally fall or be pulled out, or it can usually be withdrawn by the animal in the event of a superficial wound.

The other is the matter of field tips. No right thinking bowman would release one at a big-game animal, yet there have been reports of some unthinking archers using them.

Sometimes laws serve as guides as well as regulations. If all bow hunters were well informed, there would be few problems in the choice of hunting tackle. But since so many of them stay outside the fold, perhaps it may be necessary to legislate against those things which can hurt the image of archery in hunting.

### A Hard Look

Too often the tendency is to sweep dirt under the rug until the bulge is noticed and we are forced to sweep clean. The intention here is to encourage a hard look at this great sport of bow hunting with a hope to extinguish any fires which might be starting. Any negatives presented here are but enlightened looks at the same ills which have been in evidence since bows and arrows came into being at some time before time was counted. But now we should look at the sport from a contemporary viewpoint and mark pluses and minuses.

On the plus side we do have evidence that archery is here to stay both at the target line and on the hunting scene. Better understanding, better tackle, better sources of information, less need to regard hunting as a means of food getting, all of these are plus values that make bow hunting a greater sport. The very facts that we recognize the need to have rules, to have compassion for the game we seek, and to regulate the harvest are all to the credit of those who govern and those who participate in the sport. In the not-so-ancient days of food gathering and war with the bow, the end result was all that mattered. The Indian who hunted a deer for its food value and

its hide placed his own needs above any humane considerations. The Englishman who defended his country with the longbow and arrows was more concerned with seeing his enemy dead than with how he died.

On the minus side, no matter how elegantly we try to present our sport, there is the necessity to shed blood. Further, in our pursuit we do intrude upon the beauty of autumn because this is the time of the harvest. We do ask to share the out-of-doors with others who may not understand what motivates us. The only way we can minimize these minus factors is through a complete approach to our bow hunting as a sport. This entails obeying the rules of law, acknowledging that we have a privilege, and keeping compassion as a companion into the most remote spot of the forest.

To encourage bow hunting as sport hunting there are at least two organizations, state and national, so dedi-

cated. The Pennsylvania Bowhunter and the Professional Bowhunters, nationally oriented, share the same aims. Each encourages archers to enjoy the sport, but the emphasis is always on sportsmanship, all the way.

Organizations can govern the conduct of their members somewhat through penalties and exposure for acts which offend the sport. However, not all bow hunters have the opportunity or the desire to join an organization. These face an even greater challenge, for they hunt alone or with others of like minds. The choice implies that they will individually accept a code of ethics. Anyone of less determination has no right to the privileges of the sport regardless of the legal rights that the hunting license guarantees.

The very word *sport* implies that the sportsman will use only fair means to outwit his opponent. Only those who have played fair can claim both the trophy *and* the triumph.

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## Lancaster Countian Top Turkey Caller

Two Lancaster County sportsmen finished in the top five in the 1972 Pennsylvania Turkey Calling Contest. Donald Shope of Marietta is the state champion, having topped 45 callers who entered the eighth annual contest. He received the large winner's trophy and a \$50 cash award. Runner-up was Chester Lesh of Ickesburg, Perry County, another top-notch caller who was the state champion in 1969, runner-up in 1970 and co-champion in 1971. Finishing third was Robert Imler of Claysburg, Blair County. Fourth place went to Robert Keck of Mountville, Lancaster County, and the fifth-place finisher was Harry Spiker of Schellsburg, Bedford County. The nonresident champion was Lou McClure of Canton, Ohio.

An estimated crowd of 3000 attended the event, held at the Franklin County Fairground. The contest was sponsored by the Franklin County Federation of Sportsmen's Clubs and sanctioned by the Pennsylvania Federation of Sportsmen's Clubs. Roy W. Trexler, PGC Information and Education division chief, conducted the affair. Contestants from four states entered the competition.

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## Suggestions for Camera Fans

Ordinary camera cases vector in thieves. Use a war-surplus 50 caliber or 30 caliber metal ammunition box, properly padded, instead. It's cheap, watertight and capacious, yet it doesn't look like a valuable property in your car.





**RIFLEMEN AT RANGE NEAR KANE** know that benchrests make precise zeroing and easy load testing possible, take advantage of their characteristics.

## Take the Guesswork Out of Shooting

By Don Lewis

Photos by Helen Lewis

**I** WATCHED through the binoculars the antics of a gray squirrel as it effortlessly raced through the tops of several large trees 90 yards away. I'm always amazed and fascinated at how easily a squirrel can manipulate its way over the small limbs with no apparent effort.

Several times I studied the squirrel through my 6X target scope, but having a self-imposed shooting limit of 50 yards, I made no attempt to shoot. I had taken cover behind a small stump 50 steps from a den tree that had produced nice size grays on previous hunts, but when a second and third squirrel appeared with the first, I began to think I had chosen the wrong spot.

I often use binoculars on squirrel hunts, not so much to locate squirrels

in distant trees, but just to have a close-up view of feeding squirrels digging in leaves or to determine if a clear shot is available. Binoculars are superior to scopes for these uses.

With no action on or around the den tree, I began to formulate a plan to slip 40 yards closer in hopes of a shot. I knew this would not be easy since most of the terrain between me and the squirrels was wide open. When a half-hour passed with nothing happening in my shooting range, I decided to walk nonchalantly toward the squirrels. But before I could get on my feet, two of them raced toward me as if they were being chased. One disappeared completely, but the other crossed the creek and went up a large dead snag.

Barking angrily at the unseen ene-



**TOM LEETE, Coudersport guncrank, checks his varmint rifle's point of impact before every hunt, if possible. This attention to detail prevents unaccountable misses.**

my, the gray went into a hole in the trunk of the snag. I kept a close surveillance on the hole and watched for a sign of the gray, glassing the snag from top to bottom. Another half-hour passed and serious doubts arose in my mind about ever seeing him again. With hunting time now down to less than an hour, I banked my hopes that the gray would eventually come out.

By sheer chance I discovered the squirrel's head above one of the larger limbs. A closer study showed the limb to be troughed out, and the squirrel was lying in the trough with just its head showing. It certainly was an ideal lookout, and to complicate matters for me, two small limbs protected much of the squirrel's head and neck so all I had to shoot at was the portion of the head from the ear to the eye. The only thing in my favor was that I had a position slightly higher than the main limb and could see part of the top of the head. Anyway I looked at it, it added up to an extremely difficult shot.

I had learned from many previous squirrel hunts to stay calm. The squirrel apparently had been watching from that spot for over a half-hour and another couple of minutes would not make much difference. Slowly positioning the binocular case on top of the small stump, I improvised a fair rest. I wanted to be as comfortable as possible and to freeze into a steady position that would assure a perfect hold.

I knew my Model 64 Savage/Anschutz with its 6X Unertl target scope would put the bullet right where I would hold; the problem stemmed from not being able to get a clear view from my position. The odds were against me and, at best, I had little more than a ¾" target shielded by two limbs. To add to my dilemma, the squirrel's head now moved and even less was visible.

As a chess player runs different moves and variations through his mind before committing himself, I studied every possible aspect of the shot in an attempt to put the odds in my favor. I decided to hold between the two limbs and on the edge of the trough to avoid overshooting. I had confidence my target ammo would penetrate the edge of the rotted limb if I accidentally hit it.

Now a gray squirrel may seem insignificant to many big game hunters, but by the time I was ready to shoot, my blood pressure had risen a few points. A few practice aims and a slight change in body position gave me the steadiness I needed. I glued the reticle on my predetermined spot and touched the light trigger.

Seconds went by. The gray never moved. Had I been deceived? Did





my shot do nothing more than plunk into a rotted knot? Had I seen an eye when there wasn't one? These were the possibilities that shot through my mind, and a feeling of embarrassment crept over me. I shook these thoughts away. I knew I hadn't been deceived, that what I'd shot at was a squirrel. If anything went wrong, it was simply that I had overshot. As I opened the bolt to drop a fresh round into the single shot, the squirrel fell to the ground.

### Touchy Target

My shot had hit directly in front of the ear, within a fraction of an inch of my point of aim. I had no way of knowing if the bullet touched the edge of the hollowed out limb, nor did it matter. Just connecting on a touchy target like that made me appreciate the fine squirrel outfit I was using.

It's not my intent in relating this one particular incident to gloat over a super shot or to prove I'm a top squirrel hunter. I just want to show what a hunter with a good rifle which he knows how to shoot can do. Ultimately, he will have a much higher ratio of success than the man with poor equipment. Without the previous shooting I had done with the Model 64 Savage/Anschutz, I probably would have passed up the shot or just depended on sheer luck to score a hit.

Prior to each squirrel season—and, in fact, each hunt if possible—I take time to run a dozen or so rounds through my squirrel outfits. Even through the chuck season when I'm shooting precision varmint rifles, I still burn plenty of ammo from the bench with my squirrel rifles. This is no guarantee I'll drop every squirrel, but it does improve my shooting with all types of rifles and gives me much more confidence in myself. And confidence in one's ability to use his rifle is what really makes a fine shot.

I stress bench shooting because it's a sure way to prove what the shooter,

his rifle and his ammo can do. After only a few groups the shooter begins to discover the little mistakes of aiming or trigger squeezing that plague most hunters. Some hunters frown on excessive use of the benchrest for practice shooting, but after many years using one, I have concluded that this type of shooting will pay bigger divi-



**BULLET SPINNER** made by John Dewey provides quick and accurate method for checking runout—and thus accuracy—of projectiles for precision shooting.

dends in the squirrel woods than off-hand or shooting from a sitting position without any type of rest.

Shooting the running deer target and offhand firing at 100 yards are definitely beneficial, but unless this type of shooting is done consistently, most hits will be the result of luck. The first thing any hunter should do is find out just what results he can get from his rifle. Notice, I didn't say the rifle's potential! Until the shooter familiarizes himself with his rifle and gets to thoroughly know it, he will not be able to bring out the best it has to offer. Also, until he corrects many of his own shooting faults, the results will not represent a true picture of the rifle's potential. The shooter and the rifle each have certain drawbacks that must be overcome before top results can be expected.

I have explained in previous columns that few if any shooters become proficient from shooting done under actual hunting conditions. Back in the depression era and gaslight days hunters counted their shells and were looked down upon unless almost every shell produced a piece of game. But hunting back then was much different than today. If I recall some of the old tales I have heard, the season's limit of rabbits was 40 and with cottontails abounding in every small orchard, creekbottom, and grain field, most hunters could shoot the limit without ever taking a difficult shot. Statewide, this would be impossible today.

### No Tough Shots Taken

A late friend of mine often told me he would kick out 15 or 20 rabbits during a morning's hunt. He was a right-handed shooter and seldom took a difficult shot running against his normal swing. He carried a double barrel, but I doubt if he ever used the second barrel unless it was to stop a piece of game that had been wounded. I hunted a few times with him in his declining years, and he just didn't shoot unless the shot was clear and

the odds for making it in his favor.

That era is gone forever, I'm afraid. The stress and strain of modern living, coupled with the way the countryside now is being dotted with new homes, is vastly different from the quiet life of yesteryear. Today's hunting is sandwiched between work schedules, school programs, and dozens of activities that require much of our time. Few hunters can afford to pass up any chance to shoot. When my father worked in the woolen mill in Worthington, it was closed for the winter when Buffalo Creek froze over. With a whole winter ahead, one day or one shot made little difference. However, you and I will never enjoy that luxury.

It has always been my contention the average hunter can become a better shot. As I see it, the old belief that shooters are born and not made is completely false. I do believe shooters are made from the process of much shooting and careful evaluation of their results. I doubt if I would have made the shot I described earlier in this article if I had not fired the rifle a great many times before tackling a dime-sized target at 50 yards.

KRIS DRISCOLL and Helen Lewis display a nice chuck taken at long range by a carefully tuned LSA 65 Ithaca 22-250 wearing Redfield target scope.





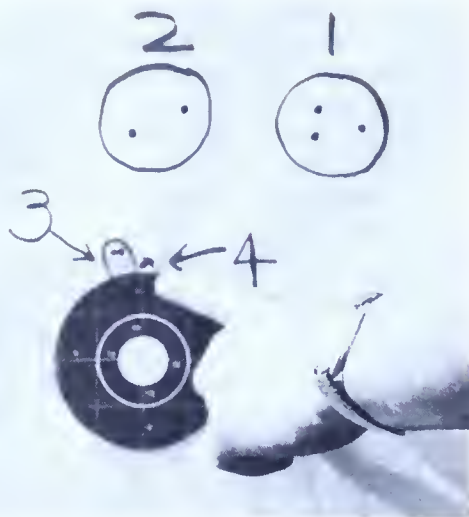
I don't claim to be the greatest squirrel shot, but I did know what I could do with the Anschutz at that distance. Time after time on the 50-yard range I have cut  $\frac{3}{8}$ " and  $\frac{1}{2}$ " groups with target ammo, and there are no doubts what I should expect when faced with a shot where the odds are against me. Leaning against a tree or over a stump is a poor rest compared to the comfort and solidness of the bench, but in the back of my mind rests the assurance I will connect if I do my part.

Practicing with the big game rifle prior to opening day should be considered a must, but using a common 22 or varmint type rifle will be less expensive and will still help the shooter overcome the faults that cause him to miss. Most so-called easy shots are missed due to the frequent error of not applying full concentration on aiming while squeezing the trigger. I've actually seen this on hunts and in practice. This is one thing benchrest shooting will soon eliminate.

### Psychological Block

I once proved this point to an elderly gentleman who had formed a psychological block that he couldn't shoot his 308 because of his age. I sighted in the 308 with good results, but his first "group" from the bench was unbelievable. The shooting window in my target house is 18" x 22" and two of his shots struck the window frame. On his second try, I watched closely and discovered the error I mentioned earlier. He took plenty of time while aiming, but in getting set for the recoil, the muzzle wandered around in an inch circle.

Using my Model 54 Anschutz Sporter with a 2-7X Weaver Classic scope, I had him fire a group at 50 yards. With the recoil stigma still fresh in his mind, he did the exact same thing with the 22 rifle and ended up with over a two-inch group. Several minutes of explanation and helping him get the shot off cut the second group



SEVERAL GROUPS, numbered consecutively, show how impacts moved as scope was adjusted to give best zero. Last three shots cut a ragged hole—a sight to make any varmint shooter happy.

to well below two inches. I wouldn't allow him to stop until he put all five bullets into an inch square. He was somewhat dubious when I told him the same principle would work with the 308.

He was a pleased man when he got up from the benchrest and had me observe four shots at 100 yards in less than five inches. Not much to write home about, but a whale of an improvement over a two-foot group. He agreed the little session with the 22 rifle had shown him what he had been doing wrong for years. He even admitted if he hadn't fired from the bench, learning how to aim and squeeze, he wouldn't have the new confidence that he could drop a buck with good shooting instead of plain luck.

I've been doing some extensive testing with CO<sub>2</sub> and air powered guns. In the rifle line, I have a Smith & Wesson Model 77A and a scoped Crossman 1400 air powered 22 caliber outfit. Using a folding ironing board for my backyard benchrest, I fire these rifles at distances up to 75 feet. The powder and primer user may have a dim view of these fun guns, but the

results I have achieved lead me to believe they have plenty to offer in the way of fun and practice. In a future column, I will give a full report on them. Using these recoilless guns, I have already induced a number of non-shooters to become interested in the sport.

The eventual outcome from all types of shooting will have to be done with the big game rifle that will be used on the hunt. However, what has been learned from the air rifle or 22 long rifle cartridge will pay off when the shooter comes to grips with the 30-30, 30-06 or Magnum. Other than a slight change in holding the most powerful rifles, the same procedures are applied. To put the bullet on target, the shooter must overcome fear of recoil and muzzle blast, and his own lack of confidence.

Going back for a moment to the squirrel hunt, I had the necessary confidence in my rifle and myself to feel I could handle the situation. The type of confidence I'm speaking about is not a product of egotism. From cutting group after group at 50 yards that could be covered with a dime to driving the thumbtacks that held the

confidence that was based on actual experience. The boaster or egotist may use a few lucky shots to claim fame, but the dedicated shooter is not interested in a superficial confidence that will fail when put to the real test; his confidence comes from actual experience.

Good shooting comes from much shooting. The old adage that practice makes perfect is partly true in the realm of shooting. No hunter or shooter can ever excel unless practice is a major part of his total shooting. Concert pianists and violin virtuosos never stop practicing, even though they are highly gifted. The man or woman who desires to become a better field shot can make a major step forward by practicing as much as possible. Bird hunters will improve through trap and skeet shooting, and the rifle shooter should spend some time at the local gun club's benchrest.

Improvement will never come if the guns are left unfired. Much of the guesswork can be taken out of shooting if my advice is followed. Along with new techniques learned from practice, shooting is also fun. That's one of the reasons I do so much of it.

---

### Spotlighting After Midnight Is Illegal

Spotlighting deer between midnight and sunrise is illegal in Pennsylvania. The practice may be enjoyed during the evening, but to do so after midnight is a violation of the Game Law.

## Looking Backward . . .

They tell some hard stories of the Western hunter—one of them in firing at a squirrel, sent a rifle ball through a bee tree; he did not wish to partake of the honey which was issuing pretty fast from the bullet hole, until his return from the squirrel hunt, but how to stop it was the question. Taking a bit of pine, he made a plug of the proper size, put it in the muzzle of his rifle, and shot it into the hole, thus preserving any further waste! A hard story that. (Hollidaysburg Register & Huntingdon County Inquirer, No. 9, 1842)



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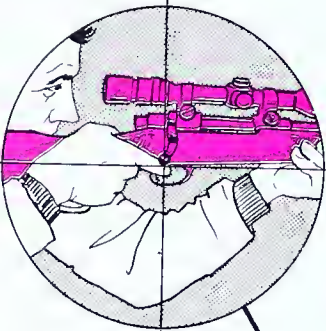
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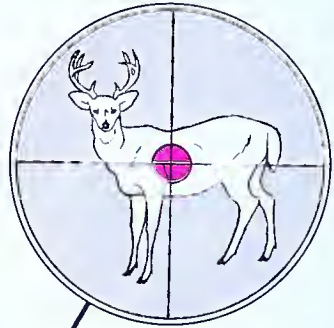
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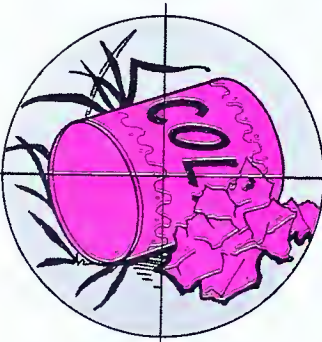
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guns safely



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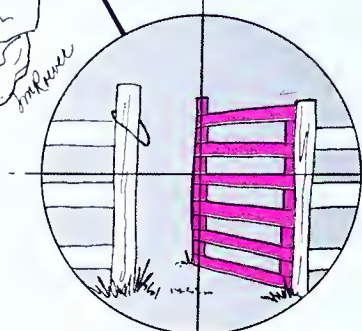
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shares game  
with landowners



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### COVER PAINTING BY NED SMITH

From the hunter's standpoint, the whitetailed deer is a completely satisfying animal. He's big enough to be impressive without being physically overpowering like an elk or a moose. He's graceful, dignified—good to look at, at any time of the year. He has highly developed senses, particularly his hearing and sense of smell, which make him a wary creature, and he can move very quickly when necessary—qualities which make him difficult to bag and thus challenge the hunter. Pennsylvania is fortunate in having a large population of whitetails . . . and in having an artist who can depict one so beautifully.

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## Letters from the Unknown

**WE** GET A FAIR AMOUNT OF mail at the GAME NEWS office. I've never kept track for a full year, but taking an average week and multiplying by 52 indicates about 2000 letters annually. Most of these are related to the magazine, so I answer them. Occasional ones are passed on to other offices because they concern subjects better dealt with by other Game Commission personnel. But all of them are answered by someone. All but anonymous letters.

Obviously, if a letter is unsigned and carries no return address, it cannot be answered. Sometimes this is unfortunate, because it's only through oversight that this information is not included, and the writer probably spends considerable time wondering why nobody answered and maybe ends up sore at me. At other times, letters intentionally are left unsigned. I'm not sure of the reasoning behind this. Some suggest I answer their letters in the magazine, while others just want to express an opinion without having to consider an opposing viewpoint, I guess.

Now, there's nothing in the world that says any reader has to agree with anything I've written or with Game Commission policies or actions as described in the magazine. Opposing viewpoints are common in everything, at least in this country. However, the only time any good can come of them is when the several parties can discuss their differing ideas. To write an anonymous letter might give a sense of "I sure told those guys a couple of things that'll raise their blood pressure," but it doesn't do much in any constructive way. In fact, it doesn't even raise my blood pressure because I normally don't read unsigned mail. My secretary, who sees all letters before I do, for years has been instructed to deposit such mail in our circular file . . . otherwise known as the wastebasket. I'm not interested in the opinions of persons who don't have the nerve to stand by what they say.

I used the word "normally" in the previous paragraph because over the past few months one fellow has taken to mailing xerox copies of his scintillating observations to others, they've automatically routed them along, and I've seen them now. But I can't get too excited about anyone who takes a news release from our Conservation News section, marks a statement like "More than 90 percent of our small game is found and produced on private lands," and asks, "Why aren't the State Game Lands producing as much if not more small game?" Game Lands make up but a tiny percentage of the land in small game country, so the reasoning behind the statement seems so obvious that it's hard to take such a question seriously. Nevertheless, we would be glad to explain our reasons for any statement made, providing normal means of communications are open. But if you don't have the guts to sign your name, don't bother writing, because we won't be reading what you have to say.

—Bob Bell.



## On His Home Grounds

By Wm. E. Workman

AS I EASED my auto off the snow-covered road, the headlights swept the adjacent cornfield. For an instant, four large pairs of green eyes were visible on the far side before vanishing into the bordering woods. It was comforting to know that my quarry was here. The long year of anticipation was over, opening day of the 1971 buck season had finally arrived.

The snow on the ground had fallen a day or two earlier. Fresh snow predicted for the night before had failed to materialize. Allowances for this new snow, as well as a general over-estimation of driving time, had brought me to my hunting site well ahead of schedule. It was not quite 5 a.m. as I poured a cup of coffee from the two-quart Stanley, unwrapped

a sandwich, and settled back on the car seat to relax.

I began to ponder the past seasons. I had first hunted deer in 1951, missing 1955 and 1956 due to military service and 1969 because of personal emergency. Would this, the twenty-first season since I had begun hunting, be my lucky year? Would I "come of age" during this year and bag my first antlered deer?

When I checked the time it was 5:30. I poured another cup of coffee and continued my reminiscing. What was the measure of success I had been missing during the previous 17 years afield? Luck? That was the only element in which I could imagine I was deficient. I had never failed to locate deer and on a few occasions these had been bucks. My first ant-





lerless deer was a nice buck which had lost its antlers. That had been in 1957. I was successful in three later antlerless seasons—1960, 1964 and 1970.

I had come close to antlers on a couple of occasions. In 1954 I played cat and mouse with a spike buck for over an hour—he on one side of a windfall—me on the other. I could never be sure if I was seeing spikes or broken limbs. I found out, however, when he dropped over the side of the ridge and was bagged by another hunter.

In 1957 I passed up a collie-size buck with a solitary 5-inch spike. I just did not have the heart to shoot this tiny deer. Many times since I have regretted this decision on two counts. For one, after all the years I've hunted, even a small spike trophy would have been better than what I had—nothing. And from the humane point of view, I should have taken the buck. Due to his small

size, he probably did not make it through the winter, and I feel a hunter's bullet is more merciful than starving to death over several months.

While hunting with my wife in 1968, I saw a sight I had long awaited. Less than 50 yards away was a huge 6-point rack with a tremendous spread. Unfortunately, the buck was standing below a rock ledge and only the rack and ears were visible. I signaled my wife and she later said she felt I either had gone crazy or had the worst case of buck fever imaginable. Of course, there was no way I could signal to her where the non-rack portion of the deer was. This buck moved out along the ledge and then came up over the top. At that point the brush was so thick I could barely make out his body form. The deer was about to cross the trail my wife was on and this time my signals were understood. I could see her get ready and I waited, and waited, but nothing hap-



**QUICKLY I DROPPED** the binoculars and brought up the scoped Springfield. The buck was standing directly behind the fawn, preventing a shot . . .

pened. Then a shot rang out from the other side of the ridge. I hurried up to my wife and we moved down the trail. Then the picture became clear. A dip in the trail, not visible from her location, was a crossing point. The buck had passed through this dip and been taken by another hunter.

Thirty minutes to daylight. As I stuffed the pockets of my fluorescent orange jacket and stepped out into the chill air I could not help but wonder if this was to be another year during which I would not fire a shot at an antlered deer.

#### Four Deer Gone

Two vehicles, each with a solitary hunter, had by now parked on the opposite side of the road and the occupants were getting ready to enter the woods. The four deer I had seen on my arrival had gone in that direction and I wondered if one of them was a buck that would be taken by one of these hunters.

I shouldered my sporterized Springfield and crossed the cornfield. With a small pocket flashlight I located a large tree which would block the

wind which was now blowing briskly. The tree was within sight of two well used deer trails that I had crossed, and the position provided a view of the slope below. I cleared the ground around the tree, zippered my jacket against the cold, and leaned against the trunk to await daylight. It was still pitch black when a single shot echoed from a distant valley. Had someone spotlighted a deer, was it an accidental shot, was someone injured? I would never know.

Daybreak brought a stronger wind and snow squalls but little else. The normal opening day volley of gunfire could be heard, but all the shots were distant. I turned my jacket collar up against the wind and snuggled closer into the crevice of the tree. A noise snapped me to attention and I turned to find a red squirrel perched on a fallen log ten feet behind me. He froze momentarily, then, scolding me sternly, disappeared behind the nearest tree.

Periodically now I could hear shots from the other side of the road. Apparently the two lone hunters I had seen were moving, jumping bucks,



and not connecting. Were they pushing one buck back and forth between them or could there be that many bucks in the area?

Suddenly a volley of five shots rang out nearby. They came from my left, in the vicinity of the ravine where I had taken my deer the previous year. I tensed and waited but saw nothing. Later I learned that the shooting had been at a buck which passed below me.

### **Not Another Hunter**

It was now midmorning and the deer would be bedding down. The only living things I had seen on this stand were a few birds and the red squirrel. Although I hadn't seen any deer, this disappointment was more than compensated for by the fact that I had not seen another hunter either. This meant I could successfully still-hunt without continually running into hunters or worrying about pushing deer to others. I had long dreamed of such a situation where I alone could pit my skills against those of the deer. The time to move was now.

My initial plans were to work in a large circle—down the slope into the thicket, across the ravine, through the brush uphill parallel to the ravine, and then back to my approximate present location. I knew that the ravine was a good crossing area and the adjacent brush was frequently used by bedding deer.

As I worked through the thicket below I crossed fresh deer tracks—undoubtedly those of the buck which had recently been shot at. There were many other fresh tracks too, all heading in a direction opposite to that in which I intended to proceed. Some instinct, or sheer stubbornness, told me to ignore these tracks and continue with my original plan. As I approached the large ravine, I could see two hunters on the far side. Apparently one of them had fired the shots I heard earlier. Upon seeing me, they turned and disappeared into the woods.

The snow had stopped now and the sky, while overcast, was bright. Cautiously I began working my way uphill, parallel to the ravine. Many deer had crossed this area during the night and earlier in the morning. Suddenly I froze. It was an instinctive action and one which I cannot explain. Similar circumstances had occurred many times during my hunting career and in virtually all cases game had been present. I have never been able to understand the reason for my actions on these occasions.

A quick scan of the area produced only trees, brush, rocks and snow. Slowly I brought up my binoculars and again drew a blank. Then the 7x35s settled on a fallen log far back in the brush. Somehow it didn't look quite right. I studied the object for some time before seeing a flicker of white. The "log" was a large deer bedded down. I had been misled because of its huge size. Now the deer moved its head. Although the body was clearly visible, the brush made it impossible, even with the binoculars, to determine if the deer carried a rack. I watched for some time, made out the deer's neck and face but could never see the top of its head.

### **Vantage Point**

I was viewing the deer from behind a large tree. Approximately 50 yards away, and somewhat closer to the deer, stood another large tree which would provide a vantage point—but the intervening area was devoid of any cover. Fortunately, there was some slope to the terrain and a person at ground level could not be seen by the deer above. I began to crawl on my belly toward the other tree. Military training had taught me how to crawl and keep my rifle muzzle clear of ground debris. Unfortunately, this training had not included instructions on how to keep a rifle scope and binoculars free from snow when a foot of the white stuff covered the ground. Nor did it include a method of keep-

ing those twelve inches of white fluffies out of a person's collar. The crawl was a tedious one.

Cautiously I raised up behind the tree. This new location provided a far superior view of the deer and to my great disappointment, the binoculars proved it to be a doe. This was undoubtedly one of the largest deer I have ever seen.

I continued to study the area. The flick of an ear caught my attention and I made out a fawn lying nearby. A moment later a second fawn stood up.

### Almost Mystical

Then I saw him. His appearance was almost mystical. One moment he wasn't there, the next he was. The big buck must have stood up from his bed as I blinked. He was far enough back in brush that his form was somewhat indistinct. There was no mistaking, however, the brightly polished antlers which gleamed in the sun that was starting to break through the clouds. I lowered the binoculars and brought up the scoped Springfield. The buck was directly behind the standing fawn, thus preventing a shot, but I wanted to be prepared for whatever would happen next.

He stood there for two or three minutes, tantalizing me with the movement of his antlers as he looked first one way and then the other. Finally he began to move down the slope parallel to the ravine. The doe and fawns remained, the standing fawn bedding down again. All of the deer were unaware of my presence. Slowly and noiselessly the buck made his way through the brush. As I kept the crosshairs of the scope on his shoulder it was difficult not to succumb to temptation and squeeze off a shot. The brush was thick, however, and I kept waiting for a better opportunity.

The deer was only a few yards away from some very dense cover. Once behind this I would not see him again. My finger began to tighten on

the trigger. Suddenly and unexpectedly he turned and headed toward the ravine. If the buck maintained his present course he would pass behind two leaf-covered pin oaks and then through a small area relatively free of brush. I knelt, put the scope on this area and waited. With both eyes open I attempted to follow his course. It seemed he was out of sight for an eternity and I prayed the wind would not shift and no other hunter would come upon the scene. Then there he was. Quickly I put the crosshairs on his shoulder and squeezed off.

As the shot rang out the deer took off in high gear. There wasn't enough time to fire again and I stared in disbelief. It had been such a perfect opportunity that I couldn't imagine missing. Yet the deer showed absolutely no evidence of being hit.

Throughout the years I had often wondered how I would react to my first opportunity for a shot at a buck. I was amazed at myself for the coolness and methodicalness I had displayed up to this point. The same could not be said for my present condition. In the instant before firing I'd had a really good look at the buck and his size and rack were even larger than I'd imagined. Now he was gone. To say I had the shakes was an understatement.

### A Few Hairs on Snow

I hurried down to where I'd last seen the deer and found only a few hairs lying on the snow. Had I only grazed him? A few yards farther along his trail I found a single drop of blood. I stopped and lit a cigarette—a difficult process the way I was shaking. The best thing to do, I rationalized, was to sit down and finish the cigarette before pursuing the deer. He had gone in the direction of the ravine. If only slightly wounded, I feared his course would take him to the two hunters I had seen earlier.

Three puffs of the cigarette ended



my patience and I was on his trail. I had gone perhaps 200 yards when I saw the hump of the deer's back lying in a depression ahead of me. The deer raised its head and I saw it was my buck, down but alive. His position did not present a decent shot and buckfever really had me now. Nothing I could do would keep the scope's crosshairs on the deer. There were no trees around for support and when I knelt the deer was out of view.

### Up and Running

Then he was up and running, the report from my rifle only hurrying him on his way.

His trail led into the pines in the ravine below. My pursuit was at a much slower pace now and soon I saw him again. He was down, not moving.

I sat there for a full ten minutes admiring my trophy. Then I realized I had to dress him out and get him back to the car—a mile away and all up hill. As I dressed him I discovered that my 180-grain slug had been deflected from my hold on his shoulder and angled back through the chest.

My long drag was eased somewhat by a group of admiring hunters who took over for the last few hundred yards. I was very appreciative of their efforts. I was fortunate they were there for it took three of us to load the buck onto the trunk of my car. It had begun to rain as I waved them goodbye and good luck.

A sense of satisfaction came over me as I began the long journey home. This was not the largest deer ever shot—he dressed out at 165 pounds—



**MY BUCK WASN'T** the largest ever shot—he was a 9-point that field-dressed 165 lbs.—but he was the culmination of a 21-year dream for me.

nor was his 9-point rack in the record book class—it scores at approximately 120 Boone and Crockett points. He was, however, the culmination of a twenty-one year dream for me. More important was the fact that I had not shot a buck which just happened by. I had found this wildest of American game in his own bed and, by waiting him out, had taken him on his home grounds. His mounted head in my gameroom provides many memories and is an ever present reminder of this day.

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### No Big Game Records Books Left

*Several months ago we announced that a copy of Pennsylvania Big Game Records would be given free with each 3-year subscription to GAME NEWS, as long as the supply lasted. Our supply of these books has now been exhausted, so this offer is terminated.*

# Bottled Bucks

By Joe Suminski

**B**UCK SCRAPES appeared almost everywhere along the deer trail Doyne Inman and I were scouting. We paused to examine one of the fresh ones located near a small cherry sapling. The rich black soil was exposed and we could plainly see the large hoofprints in the moist earth. Doyne knelt down to more clearly examine the sapling that had been hooked and ripped by a heavily antlered buck. Our silent observation was disturbed by the explosive sounds of two fleeing deer. Before we had a chance to recover from the unexpected shock the two deer leaped over the ridge and were out of sight. All we managed to identify were two large white tails waving arrogantly as if to say, "We out-smarted you again."

Ted Tibbets, working his way along the ridge below us, had a good view of the two deer and promptly indicated they were bucks by his outstretched arms. Ted joined us shortly to give a first-hand description of the two fine deer. He claimed an 8- and a 7-point—give or take a point.

## Wild Dash

After some discussion we decided the two bucks must have been bedded within a short distance of their scrapes. When we came pussyfooting along and caught them by surprise they decided to lie low and let us pass. Because we remained so long examining their scrapes, the bucks' taut nerves were unable to take the waiting game and made a wild dash for freedom.

All indications led us to believe the rut was on—a little unusual for late November in northern Pennsylvania. The warm fall could have delayed mating. We were not really too concerned about the reasons for the late rut, just happy to know the bucks

would be hanging around the does come Monday, the opening day of buck season.

Droppings and other deer signs were good indications that several deer had been using this bedding area as they had in previous years. Their reasons for bedding here were obvious. Heavy slashing and numerous blowdowns gave good food and cover.

## A Dozen Bucks

My brother Andy and I have had a camp in Cherry Grove for eleven years and we've hunted this area regularly every deer season. To make it easier to discuss the region, we've named one of the ridges we usually hunt "Andy's Ridge," the other "Joe's Ridge." Andy has taken five nice bucks from his mountain, and I have bagged seven from a section approximately 200 yards long on mine.

A cherry tree about two feet in diameter looked like a suitable stand. It was boxed in by four well-used trails, five rubbing trees—one only a dozen steps from the stand—several scrapes and plenty of fresh droppings. I consider the latter to be most significant.

Locating Ted's stand wasn't easy; however, we found what we were looking for after an hour of searching. From the looks of things we had the two mountain passes well bottled up. My brother Andy and Doyne would be stationed about 300 yards apart on Andy's Ridge, Ted and I about 150 yards apart on Joe's Ridge. Our look-outs formed a bottleneck in conjunction with the early morning deer movement. We knew from experience that hunter movement in the early morning would drive the deer in wider patterns past Andy and Doyne. By the time they reached us they would narrow down to just a



few main game trails as they made their pass through a natural saddle on Joe's Ridge.

With about three hours of daylight left, I asked Doyne and Ted to explore the southern slopes of our hunting grounds. Ted declined the invitation and decided to meet Andy near his stand to return to camp. I like to explore a new section of deer territory each year to familiarize myself with the terrain. There is the ever present possibility of uncovering a new and better stand. Knowing the territory may also be helpful when trailing a wounded deer into it.

Doyne and I began scouting at a pace we felt would put us back on the main trail to camp by sundown. Deer signs were plentiful, although not enough to make me change my original stand selection. After a considerable amount of wandering, we picked out a windfall and sat down to rest. I noticed a shiny object showing through the leaves. It resembled the bottom of a bottle. I dug it up with my hunting knife. Much to my surprise it turned out to be an old wine or whiskey bottle with a clamp-on cap similar to the old Mason canning jars. Maybe it was a remnant of the old CCC days. No matter how it had got out there, the bottle presented an air of mystery.

**JOE SUMINSKI with his 6-point taken early on the first morning.**



**AUTHOR'S BROTHER, Andy, with the fat spike that made hunt a complete success.**

In a joking manner I told Doyne I would open the bottle, release the genie and make one wish which would of course be granted. "Good idea," he said, and with a flourish I did so, impulsively wishing that all four of us would connect on bucks this year. Even as I said it, I realized this was probably too much to hope for even as a joke. We had been trying to accomplish this feat for eleven years, without success. We had hung a couple from the hickory a number of times, and usually managed at least one, but a clean sweep, never.

Back at camp we found Andy and Ted completely relaxed near the fire, claiming they were about to fire three rounds to guide us home.

After completing supper we honored a standing invitation to all of the camps on our lane to join the Rosses for snacks. This gathering has been an annual event since 1961 and we thoroughly enjoy it. It affords an opportunity to chat with hunting acquaintances we haven't seen all year.

Sunday we attended church at Warren. It's probably the only place on earth where the priest administers a blessing to all hunters in the name of safety and success. After church we all called home to check with our families. The remainder of the day we attended to hunting preparations.

Even at 4 a.m. the sound of bacon crackling on the skillet and the aroma of perking coffee is enough to rouse our gang. Andy jumped down from his upper bunk and shouted at the top of his voice, "Hang 'em on the hickory!" He does this every year, yet it's still a welcome sound. It's his way of greeting the first day of the season, the day we've been waiting for all year.

Three inches of new snow had fallen during the night. This was exactly what we wanted; however, it posed a problem to me when I reached the cut-off trail to my stand. After combing the area several times I came across an unusual twisted tree I remembered from the previous day. This was an immediate guide to my stand.

I made myself as comfortable as possible for what could be an all day wait. Light snowflakes touched my face and cooled my cheeks as day slowly broke. I couldn't help but wonder which one of us would get the first shot. My eyes began adjusting to the dim light and within a few minutes visibility increased from 15 to 30 yards. In a relatively short

**DOYNE INMAN and his beautiful 8-point. This symmetrical rack was the biggest taken on this hunt and it too was bagged on the first morning.**



period of time it was light enough to shoot.

The first shot echoed from several miles away. It was 7 o'clock and nothing moved below me. The next shot came from across the valley. I was almost certain it was Doyne, as it sounded like a shotgun and he was using one with rifled slugs. It was 7:12 a.m.

### **Leg of a Deer**

A slow movement caught my eye. It was the leg of a deer some 60 to 70 yards away. Because of the thick brush I was unable to make out the entire outline of the deer. Several more cautious moves caught my eye, than the outlines of seven deer appeared. They passed out of sight before I could make out any antlers, even with the scope.

The shots began to ring out more frequently now, most of them at a distance. Probably on the average of two to three per minute. Another movement to my left. Two large does and a fawn passed. I watched their back trail for several minutes hoping a buck would follow. Nothing appeared. A twig cracked behind me as I checked my watch again. It was 7:40. One lone deer—no rack.

The serenity of the forest was broken by the sound of running deer. Here they came. My 300 Savage snapped to my shoulder in readiness. I scoped the first deer, the second. Both does. What a letdown. As I began to lower my rifle the sound of more cracking twigs brought my rifle up and my heart pounding in my ears. Here he came at top speed—a buck! I swung my 300, and squeezed off a shot as soon as I saw daylight between his neck and my scope post. He kept right on moving even though I thought I saw him hunch. I fired again and again as fast as I could work the lever and aim. He stumbled, rolled to a halt 40 yards to my left.

I waited a moment, rifle ready, to see if he might try to get up, but he didn't. When I went over I found



that all three shots had connected. The rack was a 6-point, not big but good enough for me.

My special drag rope was tied to the buck's antlers and he was ready for the trip to camp. This rope has evolved from my need to make this long drag an easier task. The hunter's end is equipped with two shoulder straps. With the proper body lean, the deer is moved along with half the normal effort. Two feet below the straps is a hand loop to lift the deer's head over blowdowns and obstructions that may hinder progress. Once I get the deer's head up over a log my body weight and lean will do the rest.

Signs in the main logging road showed that someone had dragged a deer out ahead of me. After studying the boot prints I was sure it was Doyne. We always study the boot prints of all of the hunters in our camp. It helps us identify our gang from other hunters in the woods when we happen across man tracks in the snow.

Within a short period of time I caught up with him. He was dragging a fine 8-point.

### Hanging from Hickory

An hour and a half later both deer were hanging from the hickory in front of our cabin. And shortly after we had finished hanging our trophies, Ted came in dragging a 7-point, his first trophy in three years of hunting. Three down and one to go, and the season only a few hours old!

Doyne and I decided to make a slow drive above Andy's stand, with the hope of completing our hunt successfully. We made our way through the thickets on the ridge and just as we reached a point directly above him his 30-30 Winchester roared. I just knew he had scored. We hurried down to find him standing over his trophy, a nice fat spike. Andy was elated when we told him that with



**TED TIBBITS** proudly displays his 7-pointer—his first trophy in three years of hunting, and a fine one it is. Group took four good bucks in one day of hunting.

his shot all of us had filled our tags. Delighted with our luck, we broke all records dragging Andy's deer to camp.

All that remained was the recording of our trophies on our "camp honor roll." We penciled in our names, dates and trophies, then used a wood burner to make them permanent. Andy's buck made the eighteenth deer taken from our camp in eleven years. Quite a record considering that the number of men hunting here has varied from two to four and, with the exception of one doe taken with a bow, only bucks are listed. We have taken other deer, but only those taken from the camp area are recorded here.

What a hunt. I am sure the memory will remain with us for many years. I'm not a superstitious man by nature, yet I can't help thinking our success *could* have resulted from my wish upon that old bottle.

Hopefully, we'll all return to hunt next season from the same stands. Whether we find another bottle to make a wish on or duplicate our success remains to be seen.





CHUCK  
RIPPER



# Humility is the Name of the Game

By Anthony M. Capitano

**Y**OU HAVEN'T slept all night. You've relived seasons before. Bucks you've killed and missed, old friends and haunts and campfires have crowded out everything else. Finally, after what has seemed an eternity, it's time to get up. What you have waited for all year is almost here and coming fast. You dress and wash and eat breakfast—sausage, eggs, pancakes, and two cups of hot, sweet coffee. Your appetite seems heartier this morning, your senses more alive.

Time is passing. You check your equipment one last time. You dampen the stove and put the screen in front of the fireplace. You lock the doors and suddenly you're out in the darkness of the dawn, gulping deep breaths of ice cold air. Above, stars are still shining. Snow squeaks beneath your feet as you walk from your cabin.

For a few moments it seems as if it is too dark. You have started too early and you'll never find your way to your stand; but as you stand there in the cold, your eyes see more and more, until at last you begin to thread your way up the hill through the pines. It's a long walk to your post and soon you open your jacket. Maybe you didn't need the extra shirt, you think. You stop often so you don't sweat up, but you sweat up anyway. Finally at the top of the hill you gaze back for one last look. The valley below is still in darkness, but here and there night lights punctuate the farther mountainsides. Headlights already have begun wending their way along the road far below.

You turn and continue through the fields on top of the mountain and on over the other side. It seems to be lighter now and you try to see if there

are any deer in the fields, though you know it is impossible. It is still too dark, the overgrown fields are too high. You swing over towards the woods on your right and finally where the last field backs up against the mountain, you cut into the woods and go up over a small ridge.

You pick your way carefully now, remembering the year you slipped crossing the stone wall and smashed the lens hood of your camera. By now you know how to avoid branches hitting you in the face and slapping your clothes. You are even satisfied with yourself for you haven't slipped or stumbled or lost your way once. Up you go past the stone wall, and then the woods goes down again, gently sloping toward a small creek where it abruptly starts to climb again. Just this side of the creek is where you will post.

## Deer Crossroads

Experience has taught you that this thick area of second growth is a crossroads from top to bottom and from side to side for the deer in these mountains. It is a hard spot to hunt and for that very reason a good one. Faint-hearted hunters stay out of it because it is too far from the road—too far to drag a deer from. Some think it is too thick—too hard for good shooting, hard even to see a deer at any good distance. But you've gone there year after year because for four seasons running now you've gotten a buck there. So you feel good. You feel confident. They say success breeds more success and you believe it.

By now false dawn has come and close-by trees and branches and leaves begin to take on distinct

shapes. In the half light of the dawn you look about to see if you want to make a last change in position. Once it gets light you don't want to move unless you have to. Where you are is okay. You scrape away the snow and leaves between two pine trees. You will post here and wait.



**YOU SEARCH. YOU LOOK.** You run from spot to spot. There is no deer. There is no blood. You feel like laughing. Like crying. You curse yourself. You curse your gun . . .

The time passes slowly and yet quickly. Your head is filled with many thoughts. You enact again and again the kills you have made here in this patch of scrub. Mixed in are fleeting thoughts and images of the new buck you will see here. The new buck you will get here.

A thought comes to mind that it is now legal shooting time. Indeed it has been so for some time. Another thought surprises you—there has been no shooting yet along the top of the mountain. It is relatively quiet nearby although sporadic shots are beginning to ring here and there throughout the mountains.

You are excited and tense. You cannot stand still. Your gaze moves all about you in this place where deer can come from any direction. It is simply a matter of where other hunters will be active. Minutes go by and you imagine you hear deer. You see nothing. You are anxious. But without a doubt you will see deer. You are facing uphill when a drive begins below you in the valley. You hear the yells of the drivers in the still morning air. Any deer in that woods and they'll be moving right now, you think. At least that's the way they usually act. You listen as the drivers progress through the swamp. You wait for shots at the far end of the swamp but none come.

Suddenly, off to the left toward the bottom, you catch glimpses of a moving deer and then another and another. They are too far away to make out clearly. You smile when you think how nicely they have cut themselves out of the drive. Instead of being pushed across the swamp they have cut up into the middle of the mountain, hundreds of yards from where any poster might be. You get glimpses of at least 10 or 12 deer but you have missed being in the right place by about a hundred yards.

As quickly as they have come, they have gone. You search where they have disappeared but no matter how hard you try, you cannot see anything. You keep looking, hoping maybe they will cut back in your direction. But you see nothing.

Out of habit you turn and 40 yards away a deer is looking at you. You immediately see it is a big deer. You think you see spikes between its ears. But it is looking directly at you, ears out, listening, watching, and you are facing directly away. He'll never hold, you think. He'll never hold. You turn as slowly as you can, afraid he will bolt. As you turn you lose sight of his head behind some trees, and in the split second before you move slightly sideways to see him again you flip off the safety and decide



against turning your variable power scope to a higher power. All the while you have been expecting him to turn and be gone. But luck is with you and he holds. You can't believe it as you lift the rifle up and sight him through the scope. At 2½X the scope gives an illusion that he is smaller and further away than he really is. You see his long spikes and in your built up confidence you ask yourself if you really want to shoot just a spiker.

But you commit yourself and squeeze and in that second time seems to stand still. Every action etches itself in your mind so vividly that later when you think about it you wonder how so many things could have happened so quickly.

At the report of your shot the gun jumps and the deer turns and you wonder how you have missed even as you see horns at least six inches above his ears and you realize what a trophy the deer really is and wonder too why you saw only spikes. You bolt another shell into the chamber and try to follow the madly running deer through slashings and scrub so thick that as you look through the scope you barely see the deer at all. You hesitate and hesitate, split seconds going by all the while, knowing he will be gone soon. You try to pick a hole through branches and brush and trees and fire again. The deer disappears. He has gone over the short steep bank bordering the creek.

You run as unmindful now of your noise and movement as you were careful about it before. Your breath comes in gulps and gasps and suddenly seems hot. Sweat drenches your neck and forehead. Even as you run to where the great deer has disappeared you are looking for blood. You see

no blood. Indeed, you do not even cut his tracks. In your excitement you have overshot the right place. You expect to find the deer lying dead. From a lung shot that let him run that far. From the second shot that looked right on.

You search. You look. You run from spot to spot. There is no deer. There is no blood. You feel like laughing. Like crying. You curse yourself. You curse your gun. Backtrack. Backtrack, you tell yourself. You find the place where he stood. A patch of hair lies spread on the snow. A few drops of blood already are seeping through the snow. You are elated for only a brief moment and then you realize you only nicked him. There is no spray of blood to give evidence of the bullet going through his body. Only some cut hair and a touch of blood and seeing again the image of the deer directly facing you, ears out wide, there is no doubt in your mind you only creased him.

By now you have calmed down and you manage to follow his tracks. A spot of blood every 20 yards or so betrays his trail, but on the other side of the creek in heavy pines among the tracks of other deer you lose him completely. You spend the rest of the morning searching and looking and thinking and wondering, and you find nothing.

Later on you meet a farmer coming through on drive. You talk and he tells of a 10-point buck they are trying to get. He tells of where they first saw him and when—an hour after you missed your buck and near a field in the direction his tracks were headed. You didn't see 10 points. You can't be sure. It can't be the same deer. You try to think back. He was only a spike. Or were those spikes his guards? You did see horns above his ears. Very high above his ears. Why didn't you see them before you shot? Suddenly it seems hot again. You don't know. You never will. The only thing you do know is that you'll never forget that buck. You missed him.

**Give Game News  
to a friend**

We Hope You Won't Mind if We Tell You About . . .

# THE GREAT GAME NEWS DEER HUNT OF 1971

By L. James Bashline

**O**N THE SATURDAY before last year's deer season, four cars carrying deer hunters were converging on Hidden Valley Camp in north-eastern Huntingdon County. All of them bore Pennsylvania license plates except one. That one was from Wisconsin. Oddly enough, the driver of that one happened to be the owner of the camp. The ignition keys were switched off as the cars slid into the mud and snow covered parking area, and after much hooting, hollering and helling, everyone's gear was carried into the little log cabin and another deer season was under way.

## Bunch of Editors

Not an unusual ritual for Pennsylvania on the weekend before deer season of course, but this particular camp did contain a somewhat unusual group of deer hunters. They included the present editor of GAME NEWS and all of the living ex-editors of the magazine, plus the son of one. Chronologically the group consisted of Will Johns, now information chief of the Pennsylvania Fish Commission; Ned Smith, artist emeritus of GAME NEWS; George Harrison, presently managing editor of NATIONAL WILDLIFE; yours truly, now a freelance writer; and Bob Bell, the current pilot of the nation's number one state conservation magazine. Will's son Tom also was with us.

George and I had been hunting here together for seven years and Will had managed to make it on at least five occasions. Ned had joined us once before but this was Bell's first time at Hidden Valley. In spite of the fact that Harrison has moved away from the Keystone state, he has not washed our commonwealth out

of his mind. He is still a great unpaid booster of Pennsylvania and every deer season finds him here. Certain plans had to be changed to make everyone's schedule coincide this year, but it was George's fondest desire that all of the GAME NEWS editors would get together for at least one joint hunt, and we made it. He had arranged everything and the first evening at camp was a grand affair. (Steak, grouse, mushrooms and a bottle of Chateau Latour.)

After a serious moment, during which we silently toasted Leo Luttringer, the founding editor of GAME NEWS (Leo died two years ago), we began to plan Monday's hunt. Maps were studied and stands were selected. George, Will and I had a slight advantage because we had hunted the area many times before. Bob and Ned would have all of the next day to scout area and pick their spots. As much of the north-eastern toe of Huntingdon County consists of State Forest land, there would be a large number of hunters surrounding the camp area. An organized drive would be impossible during the first two days of the season, and we have learned through trial and error that the best way to hunt at this location is to pick a well traveled runway and "sit it out."

## Lazy Way?

To a Western-oriented deer hunter the sit and wait technique may sound like an extremely lazy way to hunt deer and to a degree it is. There is some science to it, however. The stand must be picked with an eye toward deer traffic patterns, visibility and safety. We have much heavier concentrations of hunters than they





DESPITE THE satanic gleam in his eye and that goatee, that's not really Mephistopheles above, but Ol' George Harrison, with his antiquated—but lucky!—M54 270. Serious feller, top right, is Nedley Dedley Smith, sometime editor/writer/wildlife artist/deerslayer, etc., while beaming boy at right is none other than Will Johns . . . his exuberance, no doubt, due to the thought of venison rather than fish on his up-coming menu. Ye Old Eds. Bashline & Bell, shortchanged in this otherwise memorable trip, didn't even get in a picture. Which is just as well.

do in the West, so the hunter who is patient and can sit for long periods without freezing or becoming restless stands a much better chance of collecting venison than the nervous sort who must move from place to place every five minutes. In areas where hunters don't reach, or after the first few days when pressure eases off, the still-hunter or pussyfooter has a chance of stealing up on a feeding or bedded-down buck. Organized drives also produce well when there is not so much competition. We elected to sit on opening day.

### Red Pine Stump

George has a favorite stand which has produced well for him over the years. He collected three bucks while sitting in the saddle of an uprooted red pine stump, and it was a safe bet he would be there before daybreak Monday. Will, his son Tom, and I would station ourselves along the narrow ridge that comes almost up to the cabin door. Bob and Ned picked spots slightly to our north but no more than 300 yards away. The intervening contours allowed all of us a line of fire that would create no safety problems.

Opening day of the 1971 Pennsylvania deer season began as a wet, snowy miserable affair and didn't change much as the day wore on. There was the usual flurry of shots as darkness painfully turned into a gray haze that continued for the next eight hours. A large number of hunters gave up the chase after an hour or so and returned to their camps for dry clothes and hot coffee. The GAME NEWS bunch stuck it out and our misery paid off.

It was only fitting that Harrison should collect the first buck, as it was his camp and he did organize the hunt. A fat 6-pointer wound up in a Wisconsin freezer after two well-placed shots from George's vintage 270. I say vintage because his particular rifle is a Model 54 Winchester that was put together way back in the

middle 30s. It was a family gun and has certainly been a lucky one for George. (As a Winchester buff, I'd give a lot to own it.) George hit the deer once through the middle of the shoulder blades as the deer was trotting right straight at him and then as it turned on being hit, he shot it again through the lungs. Either shot would have killed the deer within seconds, but justifying the second shot George later said, "I really didn't think I needed to shoot again, but after all, it's a long ways back to Milwaukee." George's buck was tagged at approximately 7:30 a.m.

About an hour later Ned spotted his 5-pointer. It was sneaking along, low to the ground, and a single shot from his old 300 Savage did the job quickly with a high lung hit. Like George's rifle, Ned's goes back a few years too, at least into the '30s. The really unique thing about this Model 99 is that it sports a sliding tang safety made by Ned himself. This feature is now offered on the current Model 99s but Smith's was made at least 20 years ago. Funny looking thing . . . but it works.

As a venison lover, Ned was more than a bit put out to discover that someone had earlier hit his deer in the right ham with a raking shot. It hadn't disabled the deer in any way, but it destroyed several round steaks.

### A "Y" for Will

At almost the same instant that Ned had scored, Will Johns dropped a nice Y buck with two shots from his newly acquired Remington Model 600 in the 243 persuasion. Three bucks during the first two hours of opening day . . . not a bad score at all!

A fourth buck was seen by Tom Johns and, while he was able to get off a shot at it, he wasn't able to make a conclusive hit. Tom and I followed up the trail and discovered that the deer was collected by some neighboring hunters who administered the coup-de-grace. We were all glad that the deer was recovered.



I wish I could report that Bell and I were successful, but it wasn't our day. Tuesday proved fruitless too for the rest of us. We saw dozens of deer—the wet weather allowed us to walk up on many—but just couldn't put antlers on them. Still, the act of harvesting three bucks out of a hundred-acre tract proves that deer in Huntingdon County are most certainly not scarce. It was a great hunt and for my money proves several oft-repeated facts about Pennsylvania deer hunting.

1. It pays to know the area you hunt.
2. Sitting and watching well traveled deer trails is the best possible way to see deer.
3. The first morning of the first day offers the highest percentage of hunter success.
4. GAME NEWS editors are pretty good shots. (This is not necessarily a state-wide opinion but it sure is "oft repeated" in the Hidden Valley Camp!)

With five editors as potential writers of this episode, the reader might ask, "How was it decided who would write this short account?" It became

my chore through the process of elimination. Neither Harrison, Smith nor Johns could write it, as they each tagged a deer and it would appear too boastful. Bell couldn't write it since he is the current editor of GAME NEWS and he claimed that "subjecting the readers to my monthly editorial is all they can stand." That left me, since the rest of the bunch considers a free-lancer almost unemployed anyway.

Now this hunt obviously didn't prove too much, but it did give us a chance to get together, engage in a little mutual backslapping, and demonstrate to the many loyal fans of this magazine that all of its editors are, in fact, deer hunters who couldn't get Pennsylvania out of their systems even if they wanted to. And then there's the magazine itself. We all have a foolish nostalgic streak in us and, believe it or not, we still care more than a little about the publication that made it possible for us to know each other. I hope you readers will indulge us in our brief lapse into sentimentality.

P.S.—Your camp or not, George—it's my turn to shoot a buck this year!

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T. Aughton



A Lot of Fathers Take Their Sons on their First  
Deer Hunt. Our Family was Different.  
I Took My Dad. And the Results, to Put It Mildly,  
Also Were Different. Let Me Tell You About . . .

## Pop's First Deer Hunt

By Paul Tree

**M**Y FATHER is 65 years old and prior to last hunting season he retired and went on Medicare. His hair is nearly all gray and he doesn't look like a Mister America anymore; truth is, he never did. But with a strong heart and good muscles, who needs looks at his age?

Well, this fellow, my dad, just finished building a cabin on the side of a mountain, and along the way he won a hunting rifle in a raffle. Now on this mountain side there is game close at hand, especially deer, so at the urging of his son, me, and his grandson, he reluctantly agreed to give it a try.

He wasn't really enthused about it, only enough to buy a hat, gloves, socks, boots, insulated coveralls and a hunting knife. He absolutely refused to gut a deer if he did get one, so I guess the \$10 knife is to be used to clean his fingernails. With all this equipment he now felt ready to go.

It was only a few days until buck season and he had already vowed he'd not make the same mistake he did in spring gobbler season, whatever that was. There's been a big mystery for months about what he did, or didn't do, last May.

The pre-dawn hours of the first morning were pretty mild, not too cold, just a bit nippy. Full battle dress on a day like this isn't needed, but he thinks the day calls for a dress rehearsal—socks, boots, insulated coveralls, the works. So off we go! We ain't halfway up the mountain before he starts panting like a cat on a hot tin roof. "Boy," he says, "this outfit is sure warm!" That was the second

thing he learned this year. I knew right then that this *student* was going to need a lot of teaching.

We didn't have any luck by 10 o'clock, so I decided we should give up the stands and mill around together for awhile. Naturally I'd like to see this guy get a deer on the first day, so I suggest he take a certain stand and I would drop back down the mountain, slip down the valley and come back up the ridge toward him. Remember, I said this guy was 65; that makes me 45 and a trip like that is no pushover. Still, for Pop I would do it.

I'm pretty wet with sweat by the time I get back up that mountain and in position to drive toward him. I'm not more than 10 minutes along the way when I look up and see *him* coming toward me. "What do you think you're doing over here?" I ask. He has a simple enough answer; he didn't see anything so he started walking this way. The discussion that followed was lesson number three.

### He Wants to Drive

There's a rather heavy section of hemlocks near the top that I suggest we drive out and he decides he wants to do the driving this time. This is okay with me and I tell him I'll take a stand above the hemlocks and he can push the deer out toward me. Well, I found a beautiful stand looking right down on a bench. I couldn't miss if anything came out, I figured.

You won't believe this, but he didn't drive through the hemlocks. He came walking right down that bench! We



spent the rest of the day on a late afternoon watch. No luck.

From here on I sort of forget what happened on what day. There was the time we were moving along the edge and came across some big old bear tracks in the snow. Would you believe I had to pull him off those stale tracks. He forgot about the deer hunt and wanted to follow that bear straight to his den. Said he'd never seen a bear in the woods.

### **Luck Can Turn**

It's unbelievable how a person's luck can turn. Buck season looked real good for us on the day before and again at 4:30 a.m. of the big day. Standing among a small herd of deer in the yard were three bucks and one of them had 8 points on a beautiful rack. We just knew one of us was going to get that big buck. Either me on the east side or Dad on the west or his grandson up on top. At the time I didn't know why that son of mine wanted to go so far away, but now that I reflect on it I'm pretty sure I know why he went off by himself and left me there alone with—you know who. We ended buck season without further incident, empty-handed.

Two hours after the opening of doe season we were still empty-handed. I was going to hunt only one day and I figured we had best cover a lot of ground if I was going to make out. So we slanted up this old log road which makes a U-turn near the top and then runs out along the ridge. Dad had learned something by now and suggested we'd better split up. He offered to scale straight up the side of that mountain to the top and take a stand so I'll be driving toward him as I come around the top. Who am I to argue? I didn't want to huff and puff up that thing.

He's not a bad climber for his age. He reached the top about the same time I finished my pipe of tobacco. I knew from experience I had better tell him where to go and to stay put.



So I said rather strongly, "When you come to the log road, stop, take a stand, and stay there." Fine, we both understood.

When I figured he was in position I knocked the ashes out of my pipe, got up off the stump and started up the road. I really thought we might get one this time, but I knew as soon as I reached the top it was another uneventful trip. How wrong I was, my dad wasn't there! This surprised me at first, but then I figured he must be a little farther up the road. So I continued. I didn't see him. "By gosh, maybe he went on out to the swamp, I bet that's where I'll find him," I muttered.

Well, when I get to the swamp, guess what. He wasn't there either! Surely he didn't go out beyond the swamp; he'd never been that far from the cabin. But I thought I'd better check anyway. Still no Dad! He didn't even answer my whistle. Where could he be? I went back into the swamp and called, still no answer. I was beginning to wonder. A whistle out both sides of the swamp brought no answer. The wind was pretty strong and I was thinking my sound wasn't carrying very far. I was getting scared. I thought I'd zig-zag back and forth across that mountain top and call down both sides. After a couple of zigs and a couple of zags and no answer I got a lump in my throat, a knot in my stomach. How long should I search by myself? Where would I get help?

"Control yourself," I said. So I draw up my composure and started zigging and zagging again. Finally, down over the edge, I heard a faint

whistle. I gave a sigh of relief. But wait, maybe he was hurt. After a quick bearing I started pellmell down over the edge. Another whistle to check my course—and there he was. His brilliant red suit was standing straight up. He was okay. I kept my cool as I asked him why he was down there and not up on top. "It's simple," he said, "I stopped at the first log road I came to."

Oh, boy. After I told him what I'd just gone through, he said, "You got any of that candy left?"

### Dad Has Doubts

Then there was the time in the hemlocks right below the cabin. By experience I knew that deer, at times, would hide there. Dad had his doubts, but nevertheless he took the stand I selected for him. This patch of hemlocks is long and narrow and again I had to go the long way around so as to make the right approach. I didn't hear any shots from Dad as I neared the end, so I knew the drive was in vain.

When I reached him I asked if he even saw any. He held up two fingers and said, "Yeah, about 30 yards away. They stopped for a bit, but I didn't get time to shoot."

I yelled, "Whatta ya mean ya didn't get time to shoot? Ya said they stopped!" Soooo, he explains it this way. They were already in the clearing before he saw them, he never heard them coming, and he had to move very slowly while reaching for his rifle which was off a little ways leaning against a tree and . . .

Oh, my gosh. And I had just spent a half-hour going through that under-

### Sample GAME NEWS Copies

*Do you have a friend who is interested in Pennsylvania's outdoors but is not a GAME NEWS subscriber? Perhaps he'd like to see a copy. Send us his name and address and we'll be glad to mail him a free copy of a recent issue of the magazine. Hopefully, we'll get some new subscribers—and maybe your buddy will stop "borrowing" your copies!*

brush. Well! I had just told him how he should always keep his rifle in his hands when, *WHAM!*

"There you are," I said, "someone just got a crack at a deer I chased out for you."

He told me it wouldn't happen again and we were laughing about it when out over his shoulder I saw something that almost made me cry. Not a hundred yards away from us comes this guy around the bend, dragging the deer. We both knew whose deer that should have been.

I ended my season without a kill and the last day of doe was coming up. I couldn't hunt that day so it fell to Mark to accompany his grandfather. I guess Dad did pretty much as expected, except he missed on his first opportunity. He said he couldn't

understand why the deer wouldn't fall. It just stood there. Mark told me he knew his grandfather was at least learning how to fire the rifle, because the next four shots were ripped off in rapid fashion. I guess the deer decided enough is enough and left.

The season ended with Mark being the only successful hunter, but Dad did get a chance to witness a "gutting." Take note that I said "witness." He never did unsheath that \$10 knife and dig in.

I know this story seems unbelievable and would test the temper of many a hunter, but it is one experience I shall never forget. In fact, I shall cherish it as all sons do after their first hunting trip with their Dad; even though I was 45 years old at the time and Pop was 65.

## Available Publications

The following publications are available from the Pennsylvania Game Commission, P. O. Box 1567, Harrisburg, Pa. 17120. Prices quoted include taxes, handling and postage.

**GONE FOR THE DAY**, by Ned Smith. All of the outstanding columns and artwork which appeared under this title in *GAME NEWS* during a four-year period. Delightful reading for everyone. 216 pp., \$2.00.

**PENNSYLVANIA TRAPPING AND PREDATOR CONTROL METHODS**, by Paul L. Failor. Everything you need to know to trap any of the state's furbearers. 116 pp., 50 cents.

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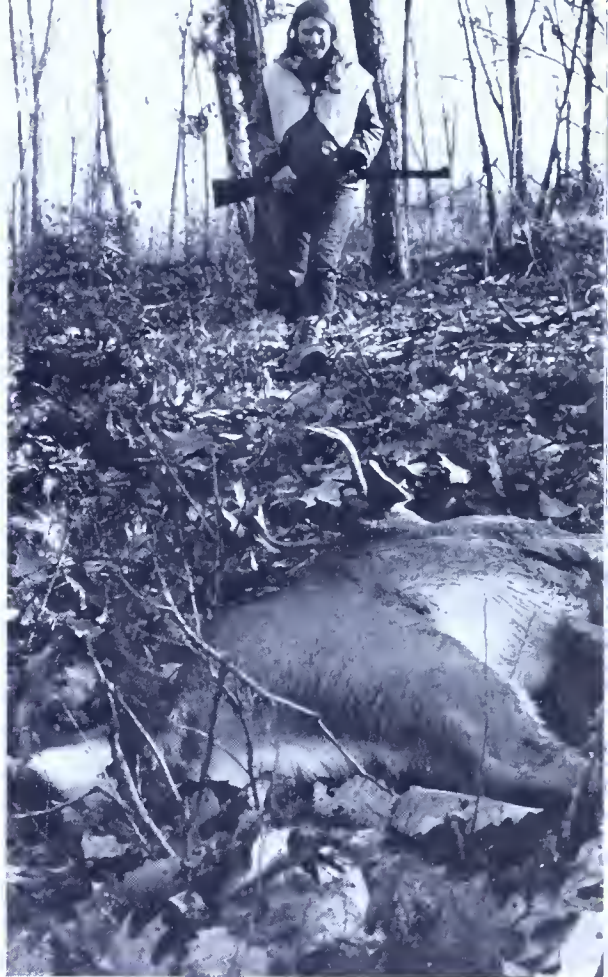
# BOOT'S BUCK

By Owen W. Haines

**A**S I LOOKED over the well-used deer trail I felt certain some of the tracks were made by a fine buck. It was a few days before buck season and my brother Jere and I were scouting our hunting area in Juniata County. On a previous trip, we had seen promising signs in this section.

The deer trail was near an old logging road that angled up and over the mountain. The surrounding area was thick with small saplings and I was concerned about where to locate my stand as visibility could be a factor in hunting such an area. My 280 Remington with a 4X Lyman scope isn't what I'd call an ideal brush rifle but it has served well in the past. I don't believe you can plow through a lot of brush with any rifle and still be certain of hitting a vital area, but experience has taught me hunters have to meet Mr. Buck on his terms or not at all. The open woods usually attract few deer but a lot of hunters.

I met Jere and he told me he had picked out a stand on the other side of the logging road above some pines. He reasoned the deer would head for the pine stand when hunters filled the woods on Monday.



**VAL HAINES**—better known as “Boot”—hurries toward her first whitetail. That big smile isn't only because of this success, but because she knows her husband and brother-in-law will be dragging her trophy out!

Jere is 21, served three years in the Army and is attending college in York. He served with the 82nd Airborne Division in Vietnam as a combat medic for a year. I'd wondered if hunting would still hold its appeal after all this time, but after getting out together a few times in small game season he still seemed enthusiastic.

I'm 33 and a quality technician at an electronics firm. My greatest interests are hunting and fishing, and deer hunting leads the list.

We had some time left, so we went back to the trail I had found. Looking over the area, I decided on my stand. Satisfied, we started the mile walk back to the pickup. I showed

Jere an encouraging sign, some fresh buck rubs along the well-used trail.

Jere's wife Val was to accompany us opening day. As it was her first deer hunt, we were hopeful she would at least see some deer. Val's nickname, "Boot," is an unusual handle for a gal. She acquired it when her dad used to say, "She's a beaut." Her brother could only manage "Boot" and the name stuck. She was to carry the 30-30 Winchester I'd used as a boy and later given to Jere when he started to hunt. He now had a 270 sporter with a Douglas barrel and a 3-9X scope.

Jere wanted to get an early start, so we decided to leave at 2:00 a.m., an unearthly hour even for deer hunters. When I pulled up in front of their apartment, I was amazed to see Boot setting the last of their gear on the sidewalk. They were both enthusiastic and I hoped they wouldn't be disappointed, but knowing how some hunting trips work out I wasn't making any predictions. Little did I realize this one would be somewhat unusual.

On the drive to our hunting area, Jere and I gave Boot some last minute tips. We told her to be sure of her target and if possible take a shoulder or lung shot.

### **A Wise Move**

The early start was a wise move; pockets of fog made the winding mountain roads hazardous. We found we were the first hunters to arrive at our area but, within minutes, another car pulled in across the road. We hoped the mile walk into the mountains would discourage some of the competition.

Allowing ourselves plenty of time to reach our stands before daylight, we started up the logging road, finding our way with flashlights. The weather wasn't as cold as I had hoped, but it was good to be heading out for another deer hunt. I like to see cold weather the first day; it

keeps the hunters walking and they move more deer.

The climb over the first ridge was a job, but carrying my coat and walking slowly, overheating was minimized. Nothing is colder after the first half-hour than a perspiration-soaked shirt.

Jere broke the silence, saying, "We should be able to drag out three today." I replied, "I hope so. It would be great if we all filled our tags."

About half an hour after we had started we arrived near my stand. I wished Jere and Boot luck as they headed for theirs.

I had a good 40 minutes before starting time. It seemed like an eternity but it wasn't. I drank a cup of coffee from my vacuum bottle and made myself as comfortable as possible. There is something special about being in the mountains as the starlit sky gives way to dawn and then the light of day. It wasn't a spectacular sunrise, as the day was cloudy, but it was a nice time to be outdoors.

Before shooting time I heard two trail bikes headed for the nearby power line. After discharging their passengers, the bikes headed back for more hunters.

Before I knew it the long-awaited opening hour arrived. With it, a shot echoed in the distance. I decided to count the shots this year, just out of curiosity. Hopefully I'd have my own to count. I didn't see a deer during the first 20 minutes, but I counted approximately 20 shots. They came from several areas, some probably miles away as they were hardly audible.

A goshawk soared overhead and I joined its flight through my binoculars. There's nothing like a deer stand for a glimpse of nature as few people see it. The chipmunk or squirrel scampering busily among dry leaves can fool you into thinking a deer is on the way, but these little animals are still fun to watch even if



they do disappoint you sometimes.

My interest in nature was suddenly interrupted by a shot from the vicinity of the power line. Within minutes things began to happen. A rustle of leaves on the other side of the small ravine made my heart beat faster. Soon I saw the gray-brown form of a deer. It was running but not a panic flight. I slowly raised my rifle. I couldn't see its head as it slowed to a fast walk then stopped behind a screen of brush. Was it a buck? Or a doe which might have accompanied the buck just shot at? Then the deer bounded out of sight. I never got a good look at its head.

### Outsmarted

Slowly I relaxed. My log seat seemed to be getting harder and I fought back a desire to move from my stand. Another hour went by and some shots echoed in the distance before I decided to move up the slope about 50 yards. I reasoned that I could see better if another deer tried to cross as the last one had. He hadn't stuck to the trail I'd been watching, but preferred to stay in the thickest cover, a crafty whitetail diversion which didn't surprise me. However, I must admit I had been outsmarted—and it probably won't be the last time.

My watch said 9 a.m.—I wondered how Jere and Boot were doing. I hoped they were at least seeing some does. Then I realized I had forgotten to count the shots after the first hour. I'd stopped at 60, about one a minute.

As I surveyed the area surrounding my new stand I figured I could make a 50-yard shot if I had the opportunity. Most of the deer taken in Pennsylvania probably are shot at 50 yards or less. Range is very difficult to judge in the woods and most hunters overestimate, I feel.

About half an hour later I heard the faint rustle of leaves above my stand. The minutes crept by. I could hear the sound getting closer



**THE AUTHOR**, whose hunting normally includes more watching than walking, and his brother Jere had the experience, but it was his tenderfoot sister-in-law who connected.

and after much eye straining I made out several deer heading my way. I was disappointed when they changed directions, depriving me of a better look.

The early morning shooting tapered off and I hoped someone would start the deer moving again. My wish seemed to be answered as a shot rang out nearby. Within minutes deer

were moving my way again. They came into view from the direction where Jere and Boot had their stands. Two deer made their way through the tangle of saplings and fallen limbs. One seemed much bigger than the other. I kept watching the larger one, hoping to see a rack.

As I peered through the scope I thought I saw antlers as the deer turned its head, but when it remained motionless I couldn't distinguish anything among the limbs and twigs. I waited, hoping for a better look. I thought it was a buck by its large size, but there are very large does around too. I began to shake as holding that position was starting to tire me.

### Wind in My Favor

I was sure the deer hadn't seen me and there was a good chance they might come closer as the wind was in my favor. As I held the scope on the big one, I grew more excited, something I tried to suppress but with no success. Suddenly, for no apparent reason the two deer leaped uphill and with a few bounds were out of sight.

Before I'd had time to think over what happened, I heard Jere calling me. As I made my way through the thick underbrush I wondered what was wrong. When I got to the logging trail I could see that Jere was very excited about something.

"Look what Boot shot!" he exclaimed. Thoroughly amazed, I looked at a nice 6-point buck at his feet. I mumbled something about not believing it, but he assured me it was the truth.

After making sure it was dead, I grabbed a front leg and turned the deer over. Boot had scored a heart shot.

Jere was the first to reach the downed deer, as it ran about 40 yards after being hit. Boot was just arriving as we looked the buck over so I unlimbered my camera to record her proud moment. After congratulations

and a few more pictures Jere asked if I'd seen the big buck that came my way. That's when I learned for sure I had passed up a beautiful trophy. But I didn't regret it not shooting, as I couldn't identify it with certainty.

Jere told me he had routed the one Boot shot, the big buck, and three does out of the thicket. He had got cold so decided to move to a stand in the thicket above the ravine he and Boot were watching. He hadn't gone far until he flushed the five deer.

He saw the two bucks but didn't get a shot. The deer ran down the ravine, and emerged above the pines where Boot was standing. She shot once as the buck passed 50 yards away but thought she had missed as it didn't falter. The larger buck must have been screened by some brush, as she didn't see it. Jere came out of the thicket just in time to get a glimpse of the big buck as it disappeared into a gully.

As we field-dressed Boot's buck we teasingly told her she'd have to drag it out. That would have been quite a feat, since the buck probably weighed more than she did.

As we were dragging the buck to the road we took our share of ribbing from fellow hunters when they found out who shot it. Most didn't even ask, as Boot's grin was so big that the successful hunter was obvious.

Some hunters would credit her success to beginner's luck. One we met said, "He ran right into it, didn't he?" referring to the heart shot. I told him Boot had to get her rifle up and squeeze the trigger, and that's more than some male hunters manage. Buck fever has cost more than one hunter a trophy.

As it turned out, Boot's buck was the only one our trio bagged last season. We took some kidding about that, but we were happy for her just the same. Now she's talking about turkey hunting. I'm not one to make predictions, but I've got a hunch that if she goes she'll bring back a big gobbler!





IT WAS NEAR BROCKPORT, in Elk County, 38 years ago, that this tremendous deer—a trophy of a lifetime—was caught in Harry Reed's sights.

## Trophy of a Lifetime

By Harry M. Reed

**T**HE CAMP IS warm now. A hot fire is crackling in the old stone fireplace, and the smell of coffee is replacing the smoky, musty smell that heralds the opening of camp and the approaching deer season. Being the "old man" in camp has its advantages. Although opening day is still two days away, the younger fellows are out spotlighting deer, and I can relax alone with my pipe and my memories. For the hundredth time I remove the bronze medallion from my pocket and read the inscription:

1971  
First Place Non-Typical  
Score 171-6  
Harry M. Reed

The wind is more noticeable now,

and the flakes of driven snow cling tightly to the windows for a few brief seconds before disappearing. As I stare at the hot shimmering coals of the fire and sink deeper into the comfort of my chair, I once again think back to that season 38 years ago when I claimed my trophy of a lifetime.

I can still remember the excitement and eager anticipation when, as a young man, I entered the woods near Brockport, Elk County, with Uncle Jack and my brother Bob. In the waning darkness we hastily reviewed our plans for the day's hunt, wished each other luck, and separated. Uncle Jack and Bob moved south along the rim of Whitstone Hollow to stands they had occupied with success in previous seasons. I chose to hunt the



**HARRY REED** is congratulated by CIA Fred Servey for taking the best non-typical whitetail entered in the Game Commission's 1971 measuring program. Trophy scored 171-6.

thick laurel at the bottom of the hollow.

It had snowed the night before, and the soft, white blanket made traveling almost noiseless. I crossed the creek and paused beneath a huge white pine to load the old 30-40 Krag which had belonged to my uncle. It seemed almost warm, and the beauty and silence of the dawn almost made me forget the excitement which had made sleep the night before impossible. Fresh tracks crossing the creek up ahead brought me back to reality, and I became extra cautious as I slowly moved up the hollow to a shelf overlooking the bottom. I cleared the snow from an area beside a huge boulder and settled down to watch a crossing near the laurel below.

The cold became more noticeable now, and I started to shiver as I heard the dull sound of shots far off. Out of nowhere, three does appeared and moved slowly into the laurel. All of a sudden I felt terribly inadequate at the thought of matching wits with such an intelligent and wary animal as the whitetail deer. As my pulse returned to normal, I pushed in closer to the rock in an attempt to

be less conspicuous. The rising sun brought new life to the forest. Crows called as they flew high overhead, and a blue-jay scolded from a snag part way up the slope. The creek bubbled and sang in the hollow below, and dull thuds of snow falling from the trees became more frequent.

I saw the rack before the deer stepped out of the laurel. My heart seemed to stop, and I was almost paralyzed with excitement as the most magnificent buck I had ever seen walked into the open area near the creek. My mouth went dry and I shook uncontrollably as I slowly raised my rifle for the chance of a lifetime. I held low behind the shoulder and squeezed the trigger. Nothing happened. A wave of sickness swept over me as I realized I had forgotten to take off the safety.

### **Hastily Thrown Safety**

At the click of the hastily thrown safety, the buck whirled and leaped into the laurel before I could fire. The entire hollow seemed to erupt with deer. Three or four broke out of the thick cover and headed down the creek, while several others angled up the slope directly away from me. Desperately I tried to find the buck, but all I could see was white flags and disappearing shapes. Helplessly, I stood and waited, hearing only my pounding heart and the silence of the woods around me. As I pondered what to do next, my eye caught a slight movement in the laurel to my right. Excitement pounded through me as I realized it was a deer sneaking up the hollow away from me. I spotted an opening through which it had to pass and raised my rifle.

The buck broke from the laurel at a full run, and all I can remember is the huge rack which seemed to float above his head like a halo. The roar of my rifle seemed miles away. The deer disappeared into the cover as I slammed another shell into the chamber and searched the edge of the laurel for my next chance. But



nothing moved. Walking slowly up the hollow, I kept my rifle ready as I approached the spot where I had last seen the buck.

And then I saw him. At the sight of my first deer lying in the snow, I began to tremble and shake. My legs felt like rubber. I was so overwhelmed by pride and excitement, it was a full five minutes before I could move to examine his rack. I counted 15 points and saw where my 220-grain bullet had hit his neck. I had almost finished dressing him out when Uncle Jack and Bob arrived to join me in a wild victory dance around my trophy. The drag to the car, admiration of my friends, and mounting of the head blends into one pleasant memory.

That rack has been all the inspiration I have needed for many successful Pennsylvania deer hunts over the years, but now it means more than ever. At the insistence of Rod Connelly, the taxidermist who remounted

my trophy, I had the rack measured by a representative of the Pennsylvania Game Commission. Much to my surprise and pleasure it was awarded first place in the Pennsylvania Deer Records Program for non-typical heads measured during 1971. A certificate and medallion were presented to me at a banquet held in Hawley, Pa.

I feel the cold more now than I used to, and the hills seem to get steeper and longer each year. I'd rather sit in front of the fire than drive the roads in the evening to spot deer, but on opening morning I'll feel the same wonderful excitement that affects all deer hunters, young and old alike. I'll thrill to the beauty of the winter woods and tremble at the sight of a deer stealing silently through the morning dawn. Perhaps those first distant shots signal success for another young man beginning to collect his hunting memories—and, if he's lucky, his trophy of a lifetime.

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## Possession Limits Defined

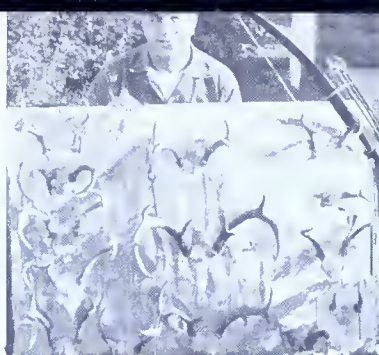
Possession limits have replaced the old season limits on most small game species in Pennsylvania this year, and have left some hunters confused. The old season limit was almost unenforceable and a number of hunters used it as a goal, rather than a maximum. When possession limits were established, many sportsmen thought they were season limits. Not so. Possession limits and season limits are entirely separate and unrelated matters, and a possession limit is not a season limit. The following is offered by the Game Commission for the guidance of Pennsylvania hunters:

On the opening days of the respective seasons for ruffed grouse, squirrels, cottontail rabbits, ringnecked pheasants and bobwhite quail, a person may not harvest, possess or transport more game of each species than the daily bag limit. After the first day, a person may not possess or have in custody or transport more than twice the daily bag limit of the previously mentioned small game species. (Wild turkeys and snowshoe rabbits—varying hares—are still governed by daily and season limits; they are not affected by possession limits as defined here.)

Possession, as used in the resolutions of the Game Commission setting seasons and bag limits, is interpreted to begin when the hunter picks up the game. Possession terminates when the hunter reaches his permanent abode and the game has been prepared for consumption or preserved for future use, or when the hunter delivers it to another person as a gift. However, game may not be held after July 1, under provision of the Game Law.



**DICK VOGLE**, Jamestown, N.Y., above, with his 15-point Clearfield County buck.



**NICK CAROTA**, Latrobe, and his 14 racks bagged by bow and arrow in Westmoreland County.



**JIM HINTENA** and Jerry, Erie, both in Warren County.

## Pennsylvania



**CHRIS BALL**, 12, Cambridge Springs, and his 8-point Crawford County buck. Mr. & Mrs. Carson Strawser, below, Sunbury, with their Tioga County deer taken the second day of archery season.



**E. W. HIBBS**, ABOVE LEFT, Levittown, and Linden, N.J., and his 9-pointer downed in York County taken in the past six seasons. Below, right, John Stever







and his father,  
on opening day



**GERALD HOLMAN**, Millers-  
town, and friends with 8-point  
Perry County buck taken with  
bow.



## er Trophies

**ANDY FRENO**, of Glen Campbell, with  
some of the 48 buck racks he's taken.  
**Steve Doherty**, Yardley, below, right, and  
his Bucks County 3-pointer.



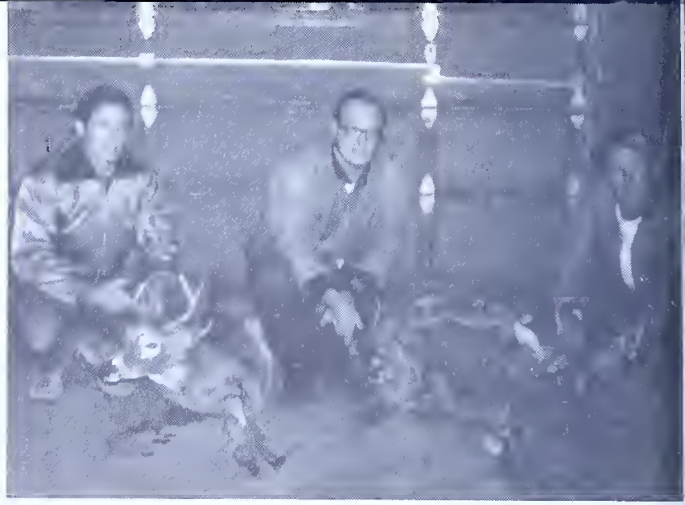
ont Columbia County buck. Center, **Thomas Gasper**,  
n County. **Richard Cole**, right, Saegertown, with five  
erry Graham, Mercersburg, and his 9-point Franklin  
en, and his 8-point Toiga County trophy.

**HAROLD WECH**, Clarks Sum-  
mit, below, and his big 15-  
point buck.

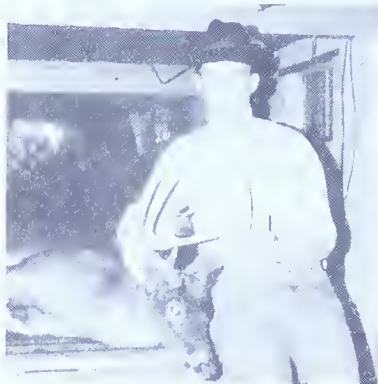




**IRA GRAHAM**, Lickingville, with some of his trophies taken during 70 years of hunting.



**CHARLES STAMM**, James Stamm, and John Stamm, of Aliquippa, with their Potter County bucks taken on opening morning, 1971.



**CHESTER CIPILEWSKI**, Wymart, left above, and his Wayne County 5-pointer; center, **Dick Adamson**, Indiana, and his 10-point 160-pound Indiana County buck; right, **Frank Holberg**, Philadelphia, with his 1970 10-point rack and 1971 6-pointer. Below, left to right: **Shane Patterson**, Chambersburg, and his fine buck; **Harry Jones** and his son **Terry**, Homer City, with Terry's 8-pointer; **Charles McVay**, Wampum, and his nice trophy.







**EDDIE FULKS**, Crown City, Ohio, above, left, with his 8-point. Above, right, Austin McReynolds, Allison Park, took this big buck in Vanango County on opening morning.

**JOSEPH ONDISH**, Luzerne, above, with his Bradford County trophy.



**CURTISS CRAWFORD**, Beaver Falls, above left, and his fine McKean County buck; above, right, Luse family with their Centre County bucks, left to right, John, Centre Hall, Tom and Richard, Coburn. Below left to right: Gary Shadle, Pine Grove, and his 7-point Schuylkill County buck; Kenneth Albright, Greensburg, with a fine Carbon County trophy; and Robert Key and son Bob, Freeport, Long Island, with 6-pointer from Bradford County.





# FIELD NOTES



## Applications Rejected

**ROSS LEFFLER SCHOOL OF CONSERVATION**—While on a field trip to the Pymatuning Waterfowl Area, we had an opportunity to help in the processing of goose blind applications. I was amazed at the number of applications that had to be disqualified because people did not follow the correct procedure in applying for the blinds. If people would take time to fill out the applications properly, it would cut down on the processing time and assure that everyone has a chance to get a blind.—Trainee William H. McIntire.



## Could Have Danced All Night

**CUMBERLAND COUNTY**—After making several unsuccessful suggestions to a farmer who was having a problem with some deer eating his sweet corn and tomatoes, he called me one evening and said someone suggested that leaving a radio play all night might keep the deer away. He must have found the right station, as I haven't heard from him since.—District Game Protector J. P. Filkosky, Mechanicsburg.

## No Wonder He's Broke

**HUNTINGDON COUNTY** — Recently I had a young man involved in a Game Law violation which entailed a \$40 penalty and an \$11 magistrate fee. The defendant stated he didn't know where he was going to get the money to settle same. After further conversation relative to the violation itself and the fact that additional charges were not going to be filed for other offenses, he stated, "I guess I'll have to sell one of my guns." I asked what kind of guns he had and this was the reply: "Well, I just bought four—a 30-06, a 32 Special, a 22 Magnum and a 16 ga. shotgun."—District Game Protector R. D. Furry, Huntingdon.

## We Hope So, Too

**CLARION AND JEFFERSON COUNTIES** — In mid-September a man stopped at my office to buy an archery license. I told him that game protectors do not sell licenses and that he would have to go to a regular license issuing agent or to the county treasurer's office. He argued that I had sold him one last year. I hope this gentleman did not use his Pymatuning Goose blind application for an archery license.—Land Manager L. L. Harshbarger, Knox.

## Hawk vs. Eagle

**ADAMS COUNTY**—On September 3, I observed a Cooper's hawk chasing a mature bald eagle in Menallen Township.—District Game Protector S. K. Weigel, Arendtsville.



## Black or Yellow?

**CAMERON COUNTY**—For several years a small group of us have cooked rattlesnake meat at our local fair as an added attraction and to raise some money for our 4-H Clubs. It seems to attract interest and some surprising questions are asked. One young man of about 10, accompanied by his small sister, watched us for quite awhile as we were preparing the snake meat. Finally they gathered up enough courage to purchase several pieces of cooked meat, but first they wanted to know whether the best meat was from yellow or black rattlers.—District Game Protector N. L. Erickson, Emporium.

## Not So!

**ARMSTRONG COUNTY** — As always, the snake exhibit at the Dayton Fair received its usual comments, such as “Won’t that blacksnake kill those rattlesnakes and copperheads?” This year on the fourth day of the fair I put a small black racer in the cage. To one woman, this furnished absolute proof for her companions that blacksnakes and rattlesnakes will crossbreed. I overheard her tell her companion, “See that baby snake! It wasn’t there Monday. I’ll bet that big black rattlesnake is the father.”—District Game Protector R. Muir, Kittanning.

## Real Turnout

**LANCASTER COUNTY**—A special salute to the Lancaster Police Department and their first Hunter Safety program. Only 30 to 40 youngsters were expected, but the program was delayed for approximately 20 minutes to complete the registration of the 172 adults and youngsters who showed up for the course.—District Game Protector R. E. Gosnell, Lancaster.



## But How Did He Remove It?

**BLAIR COUNTY**—While watering a local golf course, the attendant forgot to replace one of the covers over a pipe which houses the watering valve. The next morning four golfers spotted a black-and-white flag waving from the pipe. They notified the golf course superintendent. When he arrived, he found the flag to be the tail of a young skunk caught in the pipe. He removed the skunk and it ambled off, not knowing it was probably the first live hole-in-one scored on the golf course.—District Game Protector H. L. Harshaw, Hollidaysburg.

## Needing Help

**CENTRE COUNTY**—While walking in the Smullton area, I was “approached” by a woods turtle. It was having difficulty getting around, so I picked him up and found the turtle had a one-inch layer of packed dirt on the under shell. This made it difficult for his feet to touch the ground. The dirt was rounded off and full of scratch marks and probably would have worn off in time, but I wonder if the turtle might have seen my shoulder patch and came by for a speedier job.—District Game Protector G. F. Mock, Coburn.



### A Problem Crow

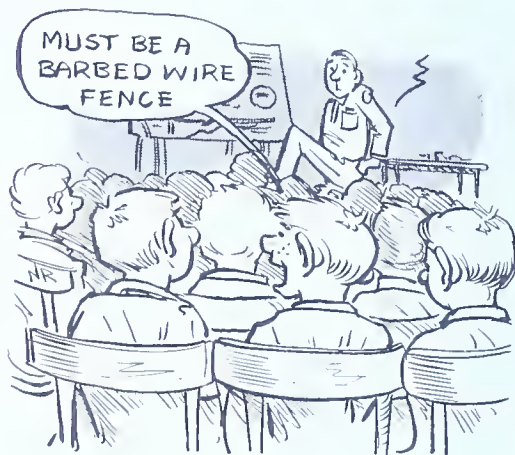
**BRADFORD COUNTY**—The other day I received a call from the Gillett Elementary School. It seems a crow had been disturbing the school—at least the teachers. The crow would dive at the kids, pick up stones and try to drop them on the teachers and sit on the window ledge and peck at the window during classes, to the delight of the kids. Hopping a ride on the milkman's truck was almost a daily affair. To amuse himself during classes, he would steal toys and clothespins and hoard them. The town seemed to adopt the lost crow and people were delighted or furious according to one's temperament. Mr. Crow left as mysteriously as he had come.—District Game Protector W. A. Bower, Troy.

### One Per Hunter

**ROSS LEFFLER SCHOOL OF CONSERVATION** — One class of trainees toured the Pymatuning Waterfowl Area this fall, and while at the headquarters building we helped process about 2000 goose blind applications. Regulations permit a hunter to submit only one application. One individual had mailed at least 11 applications. Needless to say, he didn't hunt at Pymatuning this year.—Trainee John R. Randolph.

### Generation Gap?

**ROSS LEFFLER SCHOOL OF CONSERVATION**—The recent open house at the Training School proved to be a very significant part of our training program. One thing that surprised me was the number and type of questions from the adults who were here. We all hear about the concern of the young generation for ecology, wildlife, hunting, and the outdoors in general, but I was impressed with the genuine sincerity and interest shown by the over-30, "establishment" members. It might be a good thing to pass on to the young generation, who often feel there is no common ground.—Trainee Frank B. Clark.



### HS Savoir-Faire

**BUTLER COUNTY**—Tim Hughes, a local Hunter Safety instructor, was teaching a class of 90 youngsters safe gun handling procedures. They also learned another lesson in composure. While demonstrating the proper way to cross a fence, Jim found his pants could not stand the strain and the seams gave way. Jim sent his son for his jacket and, not turning his back on the audience, nonchalantly tied the jacket around the waist and continued with his lecture. — W. N. Weston, Boyers.



### Helpful Hint

**BEDFORD COUNTY**—To attach your turkey tag or big game tag, try using a stiff piece of wire about the size of a woman's hair pin. A couple of twists and it's on to stay.—District Game Protector T. C. Barney, Everett.

### Close To Home

**MIFFLIN COUNTY** — Although complaints often come in from all parts of the county, I wasn't prepared for one of them—from my wife. She stated that every time she hung her wet mop out to dry on the clothesline, a sparrow was stealing the cords from it to build a nest. Checking the mop, we found over half of the cords missing. Solution—the old mop was left for the sparrow and mother bought a new one.—Law Enforcement Assistant J. D. Moyle, McVeytown.

### Car Chaser

**SNYDER COUNTY**—As I drove by a Snyder County farm a dog began chasing my car. Immediately a young goat standing in the lawn joined in the chase that lasted for about 100 yards. A good example of how kids pick up bad habits by following bad examples.—Land Manager K. W. Dale, Middleburg.

### What Good Old Days?

**CLARION COUNTY**—I had been in Clarion County about a month when a man told me I should have been here back in the good old days when there was a lot of game here. I didn't tell him that during this short period I had picked up from the highways 23 deer, one black bear, numerous small animals plus seven deer killed for crop damage. — District Game Protector J. A. Badger, Clarion.

### Added Attraction

**BRADFORD COUNTY** — At the Sullivan County Bow Hunters' Festival Exhibit, the mounted bear attracted a good deal of attention, but behind a sliding window on the opposite wall were two live bats. One woman made at least four different trips to the building to show the bats to different people during the day. Many people thought we put them there but we had not. Late Saturday night they left and failed to return. Could it be they had enough of people?—District Game Protector D. C. Beach, Towanda.

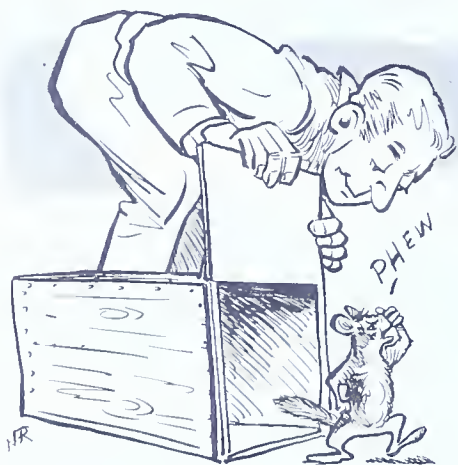


### Turnabout!

**ADAMS COUNTY**—It would be interesting to know the degree of satisfaction a bird dog must experience when he locates game and settles down to a solid point. Any reaction by his quarry, other than normal, must come as quite a shock. One especially unusual situation was witnessed by Jim Carpenter, of Littlestown, when his dog pointed a hen bird with a clutch of chicks. Jim described mother hen's charge as comparable to that of an aroused tyrannosaur. Needless to say, Jim had no use for his check-rope the rest of the day.—District Game Protector J. J. Troutman, New Oxford.

## Full Day

**UNION COUNTY**—The local Buffalo Valley Sportsmen's Association celebrated National Hunting and Fishing day, Saturday, September 23, with coon dog trials, rifle and pistol shooting, trap shooting, display of snowmobiles, trail bikes, etc., and served over 400 people at an evening chicken bar-b-que.—District Game Protector J. S. Shuler, Lewisburg.



## Only Skunks?

**MONROE COUNTY**—Having my own skunk problem, namely skunks ripping open plastic trash bags placed in my garage till disposal and scattering the contents from wall to wall, I set a box trap one night to remove the culprit. Within three hours my wife and I trapped and removed two black cats, a skunk and a chipmunk.—District Game Protector D. E. Overcash, Stroudsburg.

## Timber Poachers

**MIFFLIN COUNTY**—As hunters take to our State Game Lands, we ask that they look at areas where timber has been cut. If you see where trees were cut, whether singly or in large numbers, please contact your game protector and give him the location—besides the “poaching” of game, we now have “timber poaching.”—Law Enforcement Assistant J. D. Moyle, McVeytown.

## Some Have Taking Ways

**SNYDER COUNTY** — Several days after the flood waters started receding, I was in the area of Sweigart's Island and had just observed three Game Commission boats which were tied on and near the receding waters. Shortly thereafter, from an observation point on a nearby hill, I watched two men load one of the boats into the back of their pickup and start to drive down Route 15. Not being sure if they had been sent to pick up the boat for someone from the Game Commission, I followed for several miles. I then had an opportunity to question them and learned that they didn't have any knowledge of Game Commission activities in the area and also didn't have any knowledge of whose boat they were in possession of. Needless to say, these gentlemen were advised to return the boat to the area from which it was removed. This was carried out shortly thereafter. I wonder how many cases of this nature occurred to other victims in the flood-stricken area?—District Game Protector J. P. Shook, McClure.

## No Chance

**CAMBRIA COUNTY**—During early June a doe was giving birth to her fawn in Gallitzin State Park. Some inquisitive campers came upon the scene. They walked very close to witness the event. The doe, fearing for her life, immediately fled to the woods after giving birth, without cleaning the fawn. The moist fluids around the fawn attracted flies of all kinds. The campers kept up the day-long vigil to make sure nothing happened to the fawn, but the onslaught of flies continued. By nightfall, when I was called, the fawn was a dehydrated swollen mass of bites, virtually sentenced to death by the well-meaning campers.—District Game Protector D. W. Jenkins, Patton.





# CONSERVATION NEWS



By Ted Godshall



*PGC Photo by DGP Jack Troutman*

**AS PART OF NATIONAL HUNTING & FISHING DAY, September 23, sportsmen's clubs all over the country introduced thousands of persons to some of the activities of outdoorsmen. This scene, at the Littlestown Sportsmen Club in Adams County, is typical.**

## Deer Mortality Up for First Nine Months

Deer mortality in Pennsylvania for the first nine months of 1972 was several hundred above the figure for the comparable period in 1971. In January through September, 1972, vehicles killed 14,761 whitetails on the state's highways, losses due to crop damage were 571, recorded illegal kills totaled 601, dogs accounted for 574, and 275 deer died of other causes. Total deer mortality for this period in 1972 was 16,737, compared to 16,118 in 1971 and 15,648 in 1970.

## Venison Value

Each year, deer hunters in the United States take home \$80 million worth of meat, according to a survey conducted by Dr. Sidney Wilcox, Arizona State University professor of engineering communications.

# STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

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ROBERT S. BELL

I certify that the statements made by me above are correct and complete.

## Woodchuck Hunters Set Safety Record

Pennsylvania woodchuck hunters established a new safety record in 1972. The 14 reported accidents involving 'chuck hunters is the lowest number ever recorded by the Game Commission. About 25 woodchuck hunting accidents are reported most years. Of 1972's 14 mishaps, only one was a fatality. This occurred when a farmer had a loaded gun on a tractor. When the tractor hit a bump, the gun dropped to the ground, discharged, and fatally wounded the man.





**JAMES THOMPSON**, vice-president of the Game Commission and well known sportsman, accepts plaque from William Guckert naming him Conservationist of the Year. Award was presented during the Fourth Annual Conservation Awards in Monroeville.



*PGC Photo by DGP Jack Troutman*  
**JONAS YODER**, RD 1, Gettysburg, put a little more effort than most into getting to Hunter Safety class in Littlestown—even wide open his 1 hp “oatsmobile” took over an hour to make the 10 miles to class.

*PGC Photo by CIA Fred Servey*  
**DEPUTY GAME PROTECTORS** crowd into the Field Division Office at Ligonier for instruction on latest Game Commission policies and programs. Such classes, conducted at regular intervals, help make the deputy force a highly effective part of the Commission.



# Salted Smoke-Cured Jerky

By Earl E. Etter

**J**ERKY CAN BE made from almost any kind of meat, but most hunters prefer to make it from wild game they have taken themselves—deer, elk, moose or whatever. I have made and eaten it for years. Some of the recipes I've used were pretty good, others left a lot to be desired, at least in regard to taste. For food value, perhaps they were all similar. But it's obviously better to get something both tasty and nutritious, and I recently learned a recipe that satisfies these requirements.

Jerky, incidentally, is essentially dried meat. It's light in weight, provides a lot of energy, and lasts indefinitely, thus is useful to hunters, hikers and other outdoorsmen. A half-dozen strips take up less space than a ham sandwich but give many more times the food value. Here's how I make it now:

Remove all fat and connective tissues possible from the meat; this is important, as fat can give the jerky a most unpleasant taste, especially after long storage. Slice the meat into strips 1/8 to 3/16 inch thick, an inch or so wide and from six to eight inches long. Tender meat should be sliced with the grain, tough meat across the grain.

Sprinkle jerky salt on one side only of meat strips. Jerky salt is made by mixing: 2-lbs. of fine salt, 7 oz. Lawry's Seasoned Salt, 1 oz. garlic salt, and 1 oz. white pepper. Put a bit more salt on the meat than you usually do, but don't overdo it. Place the salted strips in a crock, plastic pail or large enameled cooking pot with salted side up and let stand for 12 to 24 hours. Under no circumstances rinse the meat upon removal from the container.

Place meat on trays (metal cookie trays are ideal for this) in a smokehouse at 150 to 180 degrees, with a non-resinous wood such as apple, choke-cherry, peach or any fruit wood for approximately eight hours or until meat reaches the desired smoked taste and dryness.

I've never tried a small smoker like the Little Chief, but think with a little experimentation one of these could turn out some very fine jerky.

Some people like their jerky to have just a little moisture. In this case, it should be removed from the smoker before entirely dry, then stored in a freezer or it will mold. Jerky that is dried until it is hard can be stored without refrigeration for long periods of time.

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## Books in Brief . . .

(Order from publisher, not from Game Commission)

**Wild River**, by Laurence Pringle, J. B. Lippincott Co., East Washington Square, Philadelphia, Pa. 19105, 1972. 128 pp., \$15. Written with great insight and beautifully illustrated with full-color photos on high grade paper, this book will help readers understand the value of wild rivers and appreciate their uniqueness.

**Issues in Outdoor Recreation**, ed. by Clayne R. Jensen and Clark T. Thorstenson, Burgess Pub. Co., 426 S. 6th St., Minneapolis, Minn. 55415, 1972. 245 pp., paperbound, \$4.95. A wide-ranging collection of articles covering all phases of outdoor recreation, including several by Richard Nixon and Lyndon Johnson. A lot of good reading.



# Camper's Christmas

By Les Rountree



**T**HE YEAR 1972 has sped past, bringing the plethora of new camping gear that will make our next outdoor adventure more fun and hopefully less complicated. The ultimate goal is, of course, to carry less and even lighter gear, but few of us can follow our own advice. There is always something new that we think we should have or a replacement item for something that is worn out. It matters little if you're on the giving or receiving end of Christmas gifts. December, and particularly present-opening time, is even more fun if there are campers in the family and outdoor type gifts featured prominently in your yuletide plans. Here are some new (and a few old and time-tried) ideas that may make your Christmas shopping a bit easier. In some cases, especially where items have to be mail ordered, a December 25 delivery date may be hard to accomplish. If this happens, just give the givewee a picture of the present. Chances are he or she won't be using it till next spring anyway.

**PROTECTIVE CASE** from Woodstream has room for a scoped hunting rifle in one side and several fishing rods in the other. Other models will handle two guns. Hard cases like these protect equipment even during air travel.

## The Ultimate Flashlight

Not a brand new item but new to me is a light from the Koehler Manufacturing Co., of Marlborough, Mass. This fine old company has been making lights since 1917 for the mining trade (and incidentally for coon hunters) and their reputation is well established. For several months I have been testing one of their rechargeable Wheatland Lights and, while expensive by ordinary flashlight standards, these lights are really something! The light I have been using is their 130 Model and it retails for \$41.95. The companion charger is a \$35 item and it really doesn't make much sense to have one without the other. It throws a quarter-mile beam and features an adjustable focus lens, 25,000 beam candlepower, waterproof



**COON HUNTERS** and others who need a bright, dependable light around camp might consider this one from Koehler Mfg. Co., Rountree feels.

switch and a shoulder carrying strap. Six hours of continuous light are assured on one charge and the wet cell battery will give at least 3000 hours of useful life. The charger operates on 12-14 volts. In addition to the home charger, Koehler also offers a vehicle-mounted charger that attaches to a car or truck battery. With this unit, it's possible to carry a fully charged light in the trunk of your car at all times and never have to worry about changing batteries. For one who is really hopped up about flashlights, and I am, this light would make a great gift. It is just the ticket for the traveling camper, coon hunter, farmer or . . . or anyone.

### Gun and Rod Cases

A line of fine new rod and gun cases for campers and traveling sportsmen is offered by the Woodstream Corp., down in Lititz, Pa. (Box 327). Available in different lengths and configurations, these cases are really tough and will protect fishing rods and firearms from anything except steamrollers. Soft leather or plastic cases are just not rugged enough to prevent your scope from being knocked around or the guides

stripped off a favorite rod. These foam-lined, high-impact plastic cases will take anything a camper will throw at them and they'll even withstand mauling by airline baggage handlers. The model I like best is one that holds a rifle in one side and a couple of my favorite rods in the other side . . . all in one case. The cases are lock equipped. Prices start at about \$30.

Also from Woodstream is a dandy little syringe type oiler that contains a special rust inhibitor called Mask. Every camper or shooter or fisherman will want several. I recently used one on a rather damp, three-day hunting trip and they have become a must in my kit. A great stocking stuffer for a camper.

### Day Pack for Hikers

L. L. Bean of Freeport, Maine, the company that puts out those fascinating little catalogs twice a year, has been listing a small, red duck pack for years. For an all day or overnight hike they are perfect. They won't take a sleeping bag, but for grub and rain-gear, all you need for a 10-hour stroll, they are just right. They call it a Scarlet Rucksack, although you can also order it in green, and the price is \$7.50. Those of you who are familiar with the Bean catalog know it's dangerous to thumb through this epistle . . . very bad for the bank account.

Another handy item for hikers that we have been using this past year is a shortie foam pad from Gerry Outdoor Sports Industries, 5450 North Valley Highway, Denver, Colo. The pad weighs only 1 lb. 2 ozs. and sure makes a big difference in comfort to





the backpacker. They retail for about \$7.

### Freeze Dried Food

Perhaps an unusual Christmas gift but one that will please the backpacker and the less ambitious chefs out on the trail is a selection of freeze dried food. Dozens of companies turn this stuff out and, as in all competitive fields, some is good and some isn't. One of the good ones is Oregon Freeze Dry Foods, Inc., 770 West 29th Ave., Albany, Oregon. Their Mountain House and Tea Kettle brands offer a complete selection of main courses, breakfast items and beverages. Their listing includes such exotic sounding things as Turkey Tetrizzini, Beef Almondine and Tuna a la Neptune. But don't let the names fool you. They are nutritious and good tasting.

Trail Chef Foods of Vernon, Calif., have introduced a new package on the freeze dried market. Most of their products are mixed and cooked right in their plastic pouches so there is hardly any clean-up at dish washing time. If a camper wanted to go really light, he could eat right out of the plastic bag. Not very polite but it would be convenient on the trail. These people cater to the camper and not to the supermarket trade, so chances are you won't find their brand in the chain stores. Check the telephone yellow pages for the camping and sporting goods specialty shops.

### Trailblazer Camping Equipment

Winchester, a traditional name in American sporting firearms, has entered the camping field in a big way. Their new line of Trailblazer products look like first class accoutrements. I can't knowledgeably comment about the whole line but I've thoroughly tested two items and they are great performers. The matchless two-burner propane stove is a beauty and does away with the frustrating practice of going for one match after

another on a breezy day. The control knob for each burner also lights the fuel with a twist of the wrist, and a built in regulator provides a smooth even flow of gas at high elevations and on wet days. It is competitively priced with other camp stoves.

Winchester is offering a whole line of lanterns, tents, sleeping bags and



**TWO-MAN BACKPACKER'S** tent from Trailblazer goes up quickly and easily, has many features which campers will benefit from when weather is rough.

outdoor clothing, but the item that really turned me on is their ultralight backpacker's tent. In the two-man model, this job weighs in at five pounds and the four man is but a pound and a half heavier. All 1.7 oz. nylon with polyester screen door and window, this is a real quality piece of merchandise at only \$39.95 and \$47.95 respectively. The tent fly top, a worthwhile addition, will cost an additional \$12.25 but it's worth it. All lines, poles and stakes are included and, best of all, it's made in bright orange. I like bright gear, both for safety reasons and psychological ones. These tents are very easy to erect and the directions are simple to follow.

## New Sleeping Bag

Outdoorsmen who do any cold weather camping will be interested in a new sleeping bag from Woods Bag & Canvas Co. This manufacturer has for generations made the famous Woods 3-Star Arctic Brand bag, used by many explorers in the Far North and others who have to endure the extreme temperatures of such regions. This new bag is a different design than the 3-Star—in fact, it's different than anything else I've ever seen—but it's of the same high quality and is also one of their Arctic Brand series. As this is written, the model hasn't even been named, though it's tentatively called the Arctic Star, and only three samples exist. GAME NEWS editor Bob Bell had one of these on a moose hunt in northern Quebec and as we photographed it for this column he told me: "Sleeping in this is pure luxury. My only com-



**NEW DESIGN** 3-layer sleeping bag from Woods gives user a choice of insulation thickness to suit temperature, or can be re-zipped to form a conventional bag big enough for two.

plaint is that the weather wasn't bad enough in Canada to give it a more severe test."

This bag is obviously suitable for below-zero camping. It has 3½ pounds of prime goosedown in a rip-stop nylon shell, total weight 7¼ pounds. But the interesting part is the design which gives three separate layers of down, all secured by heavy duty nylon zippers. These allow the user a choice of covering. In temperatures down to 15 degrees or so, he can sleep under one layer; for colder weather, he crawls into the bottom compartment, which gives a double layer of down—perhaps six inches of loft—over him. When used with a foam pad underneath, which provides far more insulation than an air mattress, this bag should be warm to at least 20 degrees below zero. A draw-string closes the mouth of the bag when temperatures are extreme, or the zipper at the foot can be opened separately when it's warm and some ventilation is wanted.

And that's not all. The zippers are so installed that it's a simple chore to "unwrap" this bag and re-zip it so that you have a conventional two-layer bag which is now big enough to sleep two people. This could be a good point when you're trying to convince your wife you need another article of outdoor equipment and—as women are known to do—she asks "How much does it cost?" We don't have that information at the moment. It should be available in January, so if you're interested, write to George Hill, Woods Bag & Canvas Co., P.O. Box 118, Ogdensburg, N.Y. 13669.

## Knives

A new piece of cutlery is always a welcome gift. I like knives slightly better than flashlights and anytime anyone wants to present me with a new blade at Christmas time . . . hooray! A new single-bladed folding knife from the Normark Company, 1710 E. 78th St., Minneapolis, Minn., is particularly interesting this year.



This heavy duty stainless steel job features a hard, black phenolic handle that comes apart with the removal of two brass screws. A great camping and multi-purpose outdoor model, this take apart feature is especially useful if one wants to gut a deer, clean fish and then slice up his porterhouse with it. Let's face it. Pocket knives are prone to become gunky and cruddy in the crevices, and being able to dismantle them completely is good hygienically. The factory edge is especially sharp and, unlike some formulas of stainless steel, the blade on the Normark pocket knife is not flint-hard. It can be sharpened quite easily.

Speaking of edges, the knives bearing the product name of Case, (a fine old Pennsylvania firm in Bradford, Pa.), and also carrying the inscription "Razor Edge" mean just that. The special sharpening process that goes into these knives makes them the sharpest store-bought knives I've ever seen. You *can* shave with them.

The fancy little mother of pearl pocket knives from Queen Cutlery (Titusville, Pa.) are also beautiful holiday gifts. Another in-state product. I'm personally proud that some of the finest handmade, mass produced knives in the world are manufactured in our state.

Another new lubricating liquid is called RVP. It comes packaged in a slightly larger container than Mask. I use this on the home work bench and in the camper. It also works well as a penetrating oil that really loosens tight nuts.

### Subscriptions

If you decide to make a gift of a magazine subscription naturally, the editor and I both hope that GAME NEWS will be considered first if the recipient doesn't already receive it. Next to that, don't overlook the pure camping periodicals such as "Camping Journal," "Better Camping" and the backpacker's special, "Wilderness Camping." Lots of good



**FOAM PAD** from Outdoor Sports Ind., Gerry Div., 5450 N. Valley Hwy., Denver, Colo. 80216, provides excellent insulation under sleeping bag.

reading about the stuff we're interested in. A one-year subscription to "Camping Journal," 229 Park Ave., New York City 10003 is \$5.95. "Better Camping," 500 Hyacinth Place, Highland Park, Ill. 60035 is \$6. "Wilderness Camping," published six times a year, runs \$4. Its address is 1654 Central Avenue, Albany, N.Y. 12205.

If you have a sporting dog you'll be interested in a catalog I recently came across called "Dogs Unlimited." You can get one free by sending to Box 548, Jackson, Ohio 45640. It is full of doggy goodies for Fido's stocking.

P.S.—For several Christmases now I've hinted on these pages that I needed a new pair of binoculars. I was not too subtle about it. Well, this year I don't have to mention it. I got 'em last year. Thank you, my dear!

### Old Hunting Licenses

The response to our request in the September GAME NEWS for old Pennsylvania hunting licenses has been most gratifying. We have received all we need to complete the Division of Information & Education's collection. We wish to express our special thanks to all those who responded.



**HUNTER'S ROUND, WITH TARGETS at unknown distances, provides a tough test for the best archers . . . and these are some of the best.**

The Importance of . . .

## AMATEUR HOURS

By Keith C. Schuyler

*Photos from the Author*

ONE OF THE best examples of amateurs' contributions to archery came to Pennsylvania in July when top bows from across the nation competed for a berth on the United States team going to Italy for the World Field Tournament. More specifically, this roundup of talent took place on July 29-30 at North Park Sportsmen's Club near Wexford north of Pittsburgh.

There weren't many participants, as tournaments go. But there was a reason, many reasons. The paramount one was simply that there is but a relative handful of archers who can compete on the level certain to be established by those who would participate. Among the other reasons was the less obvious one spelled out in hours of practice week after week to develop skills needed to compete

with the best in the world. A less important one, but nevertheless a consideration, was the \$20 entry fee for archers who may not accept an award worth more than \$70 and still retain their amateur standing.

There were high scores, and we're going to talk about them. But the important point for archery and archers everywhere is simply the people who were there. Not only the participants. The people who contributed their time and effort to make the tournament move smoothly are also a part of that group which keeps alive and growing the spirit of archery. They, too, contributed their hours.

It was a tribute to North Park Sportsmen's Club, particularly director of publicity Jim Diana, that this important contest was brought to



Pennsylvania. And Jim made sure that television and the press were on hand to properly record the event. It was his telephone calls and informative letters that coaxed my pen and cameras westward.

So the tournament to pick the best in America for field competition was held. It is now common knowledge that Pennsylvania's Johnny Williams went on to win in Italy as well as in the Olympics and add to his world target crown. But when the contest started at North Park, Pvt. Williams had no greater claim than any of his competitors, except possibly by reputation. At the end of the first day, fellow Pennsylvanian Larry Smith was standing right alongside John with an equal 532.

Pushing hard was Dennis McComak, self-taught comer from Columbus, Kansas, with a 526, and Tom Jeffery and Chris Lubicki were tied only two points behind with a 524 each. It was the hunter round, usually the toughest for sight shooters who are more familiar with the conventional bullseye field targets.

Barbara Smith, newly married and determined to retain the reputation she established on the archery range as Barbara Hoburg, was comfortably in front with a 509, followed by Janet Ashbaugh, 478, Maureen Bechdolt, 466, and Janet Craig, 455.

Rodney Hoover, Myerstown bare bow bender, had a shaky one-point lead over James Zettlemoyer, Bethlehem, 471 to 470. Close behind with 464 was Franklin Ditzler, Lebanon, and Daniel Grondin, of Hamilton, Mich., was within eight points of the lead with his fourth place 463.

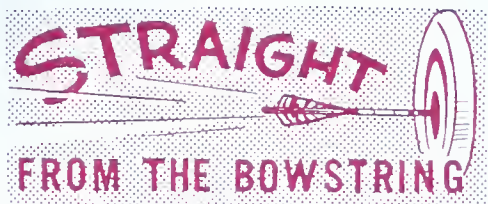
Eunice Schewe, then ladies' world



**NORTH PARK Sportsmen's Club, outside of Pittsburgh, provided excellent facilities for the World Field Tournament tryouts.**

bare bow champion by virtue of her win at South Wales in 1970, had established her authority with a 379, well out in front of Betty Yowler who reported a 256. So, the first day ended with top scores other than Schewe's so close that no one could claim or concede a victory.

It had previously been established that certain minimums would be necessary to make the team for the world tournament scheduled for September 16-17 at Udine, Italy. Men's free stylers needed at least a 450 average in both hunter and field rounds and the girls had to come up with 400. In men's bare bow division, it took a 400 average to qualify and the ladies were permitted a 350. Consequently, it seemed likely but one lady would represent the bare bow division by the end of the first day. Mrs. Schewe, of Roscoe, Ill., seemed certain of a chance to defend her world title. A remarkable lady, she expects to become a grandmother in February.



Aside from the overnight rest, contestants had an opportunity to enjoy the facilities of the 3800-plus member North Park Club. It was only in January of 1972 that the club took on archery as an activity, but a program of Wednesday and weekend shoots was carried through the year among 30 active archers. The 46-year-old club has 15 acres of its own and an additional area around the property was leased to permit a full 28-target field course. Indoor shooting with six archers on the line is possible in the spacious club building. Donald Karchner is sports director.

### Try-Out Tourney

Setting up for the try-out tournament were Wayne Stark, Ray Weichel, Kenneth Altfather and Bill Smith, all of Pittsburgh. They had done a good job in making a challenging and varied field range. Just prior to the hunter round, Olympic Coach Bud Fowkes placed stakes for

the unknown distances required. Al Oswald, Pittsburgh, was tournament director. Clayton Shenk, executive secretary of the National Archery Association, was present as an observer.

Rain was a minor threat on the second day, but the clouds were somewhat welcome as they held back the July sun. It appeared for a time as though Pennsylvania would be sending two freestylers in the men's division to the World Tournament, as Larry Smith continued the pressure on Williams. However, it was Dennis McComak of Kansas who came up with a surprise as he overcame his six-point deficit and passed Larry Smith in the finish. When the final scores came in, John Williams was well in front with a two-day total of 1079. But McComak was second with 1066, five points ahead of Smith.

Although only eight points had separated the first four archers in this division at the end of the hunter's

**TOPS IN THEIR FIELD**—the U.S. team for the World Field Tournament in Italy. From left, front row: Rod Hoover, Myerstown; Dennis McComack, Columbus, Kansas; Johnny Williams, Cranesville; Jim Zettlemoyer, Bethlehem. Second row: Maureen Bechdolt, Loveland, Ohio; Barbara Smith, Pittsburgh (declined trip to Italy), Eunice Schewe, Roscoe, Ill.





round, the spread was now 33 points, as Chris Lubicki turned in a 1056 for fourth place. He had run away from Tom Jeffery who had to settle for sixth with a 1035, and it was Richard McKinney who moved into his position with a 1054.

Barbara Smith added to her lead for a two-day total of 984. However, Maureen Bechdolt came from behind to push Janet Ashbaugh out of second place with 943 to 939. Janet Craig was still in fourth position with a 927.

As events unfolded after the tournament, Janet's disappointment at being pushed off the second spot was alleviated when Barbara Smith elected not to attend the tournament in Italy. As second runner-up, Janet was placed on the team in her place. By coincidence, there had been eight points separating the first four shooters in both the men's free style and bare bow divisions. However, Rod Hoover really asserted himself on the field faces and came up with a two-day total of 920. In one of those rare tournament happenings, Jim Zettlemoyer and Daniel Grondin ended up with identical two-day totals of 881. However, Zettlemoyer was awarded second place on the basis of the number of hits on the targets. Dan Grondin was awarded a place on the team since only one lady qualified in bare bow.

As expected, Eunice Shewe came in with an impressive grand total of 744. Betty Yowler's 487 was not enough to qualify her for the team.

And so it was over. There were no big surprises, but scores in some instances were so close that it was obvious many contestants shot well enough to compete with the best. Nevertheless, there must be winners at each meet, and this one was for the privilege of representing all field archers under the rules of Federation Internationale de Tir a l'Arc.

As an example, Maureen Bechdolt, who had to settle for second at North Park, went on to win at Italy. The Cincinnati area sharpshooter turned

in a 921 to win fairly easily over Johannsson, who shared an 896 with Danielson, also of Sweden. Janet Ashbaugh was fourth for the United States.

Pvt. John Williams won for the United States in Italy with a 1068 and Dennis McComak turned in a 1053 for second place, 20 points over third position Karlsson, of Sweden.

Eunice Shewe ran into tough times in Italy as she relinquished her world title to Grandquist, of Sweden, who placed first with a 751. Fielding, of Great Britain, was second with a 739, and Eunice turned in a 687 for third position.

### Sweden—One, Two

Rod Hoover narrowly missed making third place as he was beat out by Sarvin, of Finland, who had seven more points than Rod's 877. The winner was Bergen, Sweden, with 952, and Karlsson made it a one-two punch for Sweden with his 904 in second position.

Zettlemoyer with 876, and Grondin with 847, took the fifth and sixth places. Each of the men's bare bow archers followed the same rotation in the World Tournament as they did in the Pennsylvania contest. It was said that the American shooters encountered some difficulty in getting used to the field layout in Italy. Some targets were placed against the butts on a level with the ground, and the ranges were laid out on a flat plain so there was no need to compensate for elevation, a condition on a typical course that makes it tougher going for all. This is, of course, more of a handicap to bare bow archers than for free stylers who utilize a sight. Also, face walking and three fingers under were permitted in bare bow. In addition, string servings were permitted up to eye level.

Although the U.S. did not fare as well in the bare bow divisions for either men or ladies, the free style crowns will rest in this country for the next two years. World field tourn-



**SOME OF THE TOP field archers in the U.S. check their tackle before moving out to assigned targets.**

aments alternate every other year with world target tournaments so that there is one major contest in each year.

Certainly no criticism is implied for the American team. Four out of the eight entrants came home with a silver or a bronze!

### **Little Question**

There is little question, when you look at the tournament scores year after year, as to who is putting in the hours of practice that it takes to produce champions. Any one of those in the upper echelon on the scoring sheets might have done as well or better than those who performed so well for the country at the World Field shoot.

For example, Janet Craig had a 1012 first place in the Fifth Annual United States Field Archery Championship held on July 22 at Seven Springs. She came in fourth at North Park with a 927. Janet Ashbaugh was second at Seven Springs with a 1003. She placed third at North Park.

Of course, John Williams is something else. No one seems to be able to hold Johnny down and he currently holds title to every important free

style amateur crown in the world. His chief competitor on a current basis is himself, and he is going around breaking his own records. Yet Dennis McComak was only 15 points behind Johnny at the World Championship event. He was 24 points behind John at Seven Springs. And John Preston, of Hudick, Pa., was only two points behind Dennis at the National Field event. Preston has been pressing hard for several years.

Rod Hoover had a 993 first place at Seven Springs, but his 920 at North Park was good enough for top spot. Either score would have given him second place in the World event at Italy.

So, except for John Williams, who must be considered in a class by himself, each has his or her good days and bad days. The most remarkable thing about Williams' performance this year was that he was sitting at the top of the heap all the way. This is a type of pressure that can destroy an archer on the target line unless he has nerves of steel. Some suspect Johnny doesn't have any nerves at all, for nothing seems to rattle him. In fact, his deliberate calmness is one of the greatest obstacles for his adversar-



ies to overcome when they compete.

One of the best examples of real determination, and most certainly practice, was Doreen Wilber's gold medal at the recent Olympics. For two world tournaments straight, she was a runner-up to the winner. Yet she went to the Olympics and came up from third place after the first day to overcome a 26-point deficit and take the gold medal with 14 points to spare.

There is talk among some sports writers that the Olympics are dead after the terrible tragedy in Munich. They fear there will be other incidents as radicals use the focus of world attention on these games to make their play. However, I believe the spirit of friendly competition which is the very heart of international games of any sort will demand that the stage be set each four years in the future. Archery was returned to the Olympics after an absence of five decades. It came back with dignity and a display of excellence that most certainly has assured it a perma-

nent place. All archers in this country can take pride in the fact that, in this modern presentation of the bow and arrow, the United States claimed two gold medals.

The Olympics provided archery with its finest amateur hour in modern times. Possibly only those athletes who excel in other sports can appreciate the practice and the personal sacrifice that is necessary for the opportunity to compete against others of like mind and determination. As archers across the country set their sights on Montreal for the 1976 Olympics, each will be willing to pay a price that transcends any commercial connotation.

But, in the final analysis, the most important amateur hours are those spent in the steady grind of backyard ranges, drafty barns, and sophisticated indoor archery ranges where champions are made. Here is where the thousands of steps are taken which lead to the top of the winner's podium—for a brief moment of glory and a lifetime of memories.

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## Book Review . . .

# The Eastern Trail

*The Eastern Trail* is a unique potpourri of outdoor information and philosophy, the first book of its type to hit the American outdoor scene. The Pennsylvania Outdoor Writers Association, Inc., hatched the idea for *The Eastern Trail* several years ago and called upon its members to supply their special brand of material for it. Hunting, fishing, and camping in the northeastern United States are its themes. Treated in a where, how and why fashion, each chapter can and does stand by itself as a fast moving guide to outdoor activities. Grouse hunting, trout fishing, camping, firearms and archery . . . there is something in *The Eastern Trail* for enthusiasts of all these and many more outdoor activities. Edited by Jim Bashline, the roster of authors appearing in *The Eastern Trail* reads like a Who's Who of Pennsylvania outdoor writers. The index lists chapters by Roger Latham, Ned Smith, Charlie Fox, Sam Slaymaker, Buss Grove, Lou Stevenson, Boyd Pfeiffer, Keith Schuyler, Day Yeager, Del Kerr, John Plowman, Don Neal, Thad Bukowski, Bob Bell, "Dutch" Wambold, Don Lewis, George Harrison, Jim Hayes, Bill Walsh and Al Shimmel, with an introduction from Will Johns. Illustrations by wildlife artist Ned Smith. A great Christmas gift for any outdoorsman. (*The Eastern Trail*, ed. by L. James Bashline, Freshet Press, 90 Hamilton Rd., Rockville Centre, N.Y. 11571, 1972. 320 pp., \$8.95.)



MUFF-TYPE EAR PROTECTORS, which give excellent protection against noise, are very evident at this chronographing session.

It's Time to Look at Some . . .

## ODDS & ENDS

By Don Lewis

*Photos by Helen Lewis*

“THERE’S THE chuck I’ve been missing all summer,” my companion whispered. “Don’t show yourself above the fence or he’ll head for the hole. It’s 375 yards across the two hollows, but you’d think it was just 50 the way that old varmint leaves the scene if a false move is made.”

“A big, big chuck,” I said, studying him through the binoculars. “I don’t think you’re right on the distance. My guess would be around 275.”

“Your guess would be more than a hundred yards short. My Sako 22-250 is right on the money at 250, and even by holding high on every shot, I’ve missed that chuck at least eight times. There’s no way to step off the distance with those two deep ravines to cross.”

I still felt my estimate was close to the actual range, but as my friend said, there was no way of accurately

stepping off the distance. A hill a hundred yards behind the chuck made the distance even more deceiving.

“Ten chances to one, you overshot,” I answered. “We’ll know for certain when I get a reading from my rangefinder.”

“You just won’t believe me, will you?” my friend said sarcastically. “I have little faith in gadget rangefinders, and you’ll find I’m right if the thing is accurate.”

After carefully focusing the Range-matic’s eyepiece, I turned the range finding dial until the pale blue and yellow shadows around the chuck merged on him.

“Well, doesn’t it say 375 yards?” my buddy asked impatiently.

“Would you believe 260?” I asked.

“No, I would not. If that’s what your so-called rangefinder reads, it sure proves my theory on those gad-



gets. I'm surprised you believe in them."

"Take a shot holding dead on," I suggested.

"It'll just be miss number nine. I'll do it, though, because I don't want to sit here all evening, and I want to send you home to study your rangefinder some more."

My friend was a good shot, and the chuck wilted when the rifle cracked. Silence could be heard a mile away as my hunting pal stared through his scope at the fallen chuck.

"Are you convinced, or do you still think the distance is 375 yards?" I quipped. "Maybe the rangefinder is right once in awhile."

"I still can't believe that yardage is just over 250. But I did have a good hold, and if I hit close to where I was holding, I'll take back what I said."

Several minutes later, my friend had made his retraction and was in the process of stepping off a long, level field to check out the Rangematic. He didn't tell me how many steps it had taken as I gave him the rangefinder, a unit made by Ranging, Inc., Rochester, N.Y., but I could see in his eyes he still thought he was going to prove the instrument was inaccurate.

I had already explained how important it was to focus the 6X eyepiece first—you don't have to know the target's size—and then merge the blue and yellow shadows on the target. I had no fears he was going to destroy my faith in the rangefinder for I had used it with good success on everything from fenceposts to chucks. I had learned to use the Rangematic on actual measured distances, and through practice I soon came up with readings only a yard or so off.



**RANGEMATIC** Distance Finder has given Lewis good results in field, telling yardage to distant targets with high degree of accuracy.

I said nothing as my hunting buddy checked his findings several times. Handing me the rangefinder, he said, "Before I tell you what I've come up with, give me a reading to the crooked fencepost at the end of the field."

It took me just a few seconds to focus and dial to a sharp image, and without looking at the reading I computed, I gave the Rangematic back. By the look on his face, I knew I had hit paydirt. Without saying a word, he motioned for us to go.

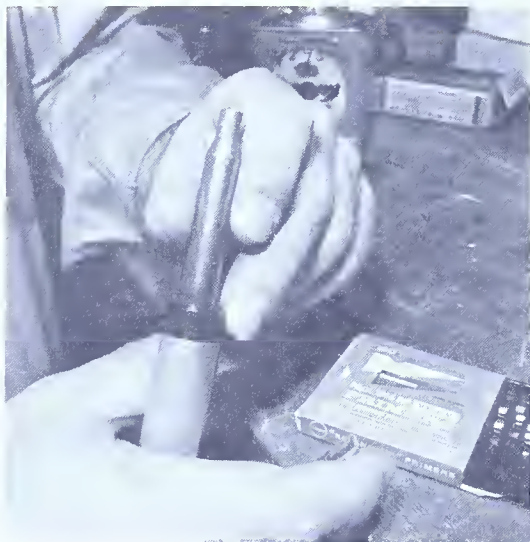
"Aren't you going to tell me how I did?"

"With Christmas just three months away, let's just say I'm going to start hinting hard to my wife to get me a Rangematic."

Perhaps the title of this article is misleading, but during the course of a year, I receive numerous items for testing. Most of them are practical things that will benefit the gun nut, and the December column seemed an appropriate time to mention them. As my hunting pal suggested, some of these items should be under the tree on December 25.

Powder scales have always fascinated me. I've used a variety of makes





**LEE PRIMING TOOL** can be had for any size case head, large or small primers. This little tool gives excellent control over seating pressure and depth.

and models, and, in all honesty, the majority are accurate and suitable for general loading. But I have had some problems with the small pan common on the older models, and also with the little poise on the right side of the beam. This thin strip of metal that measures the tenths of grains is easily moved by accident.

I feel Ohaus Scale Corporation made a good breakthrough with their new Model 10-10. I've been using one for some time and have learned to appreciate its large capacity—up to 1010 grains by using the extra weight attachment—and I have no kicks against the micrometer poise replacing the thin metal type. Also, the pan has a dandy pouring spout, eliminating the need for a funnel.

I also like the Ohaus Model 304 Dial-O-Grain because I'm constantly weighing shot charges and checking powder weights. This double beam model is more expensive, but it's truly a fine instrument. It boasts a very large pan with pouring spout, hardened steel knives and polished agate bearings, along with magnetic damping. It features a heavy base powder trickler, permitting the user to quickly throw slightly light charges

and then bring the beam slowly to center with the trickler.

A feature I particularly like with the 304 is the dial for setting tenths of grains. On normal powder charges, I move the poise on the first beam (the second beam's calibrations begin with 100), which is measured in increments of 10 grains, and then turn the dial to the desired extra grains or tenths of grains. As an example, a very accurate load for the 222 Remington uses a 52-grain benchrest bullet and 21.2 grains of Reloder 7. This requires sliding the first beam indicator to the deep notch at 20 and then dialing to 2/10ths past the figure 1 on the dial. Very simple and very easy.

If a load thrown from the powder measurer is too light or too heavy, turning the dial until the beam is on center will show the exact weight in a matter of seconds. The enormous pan is ideal for weight shot charges.

Another quality item is a bullet spinner. I'm not sure how much value a spinner has for the average handloader, nor am I sure that with today's fine bullets a spinner is needed except for those who pursue benchrest shooting as a major hobby. But



**QUICK-OPENING** lens covers from Ed Vissing protect scopes from rain and snow—and also from dust when rifle is standing in rack.



I do believe that if every possible variable of shooting is to be removed, a bullet spinner is a must.

Good bullet spinners are not available at every hardware store or sports shop. I have one made by the John Dewey Gun Co. of Clinton Corners, N.Y. It features a dial indicator capable of measuring down to 1/10,000 of an inch. This level of accuracy requires equipment of the highest quality.

The main purpose of the bullet spinner is to check the concentricity of a bullet and the squareness of its base. Bullets holding to tolerances under .0002 (two-tenths of one thousandth) are usually handmade, but new methods in processing and manufacturing are putting factory bullets on the market that almost guarantee every bullet to be under .0005 runout. While doing some testing with Remington's 40XB-BR 222 using their new 52-grain HP benchrest bullet, I found 62 out of 100 were under .0003, 26 ran out to .0004, 9 to .0005, and the remainder to .0006.

### Hunting Bullets Also Good

I was not too surprised with the excellent readings I got with the new bullet, knowing a lot of time, money, and research had gone into it, but I was surprised when I ran several hundred conventional hunting bullets through the spinner for the sake of comparison. Thinking I would have runouts to more than a full tenth or even much more, I found the mass produced hunting bullet to stay far under my expectations. A few were down in the benchrest category (most top benchresters are not squeamish about using bullets that run out to .0002) and the vast majority stayed within .0006 to .0009, which is a compliment to today's bullet makers.

I'll reiterate that checking bullets may be more of a psychological satisfaction than a necessity for the average handloader or chuck hunter, but I now find myself checking bul-



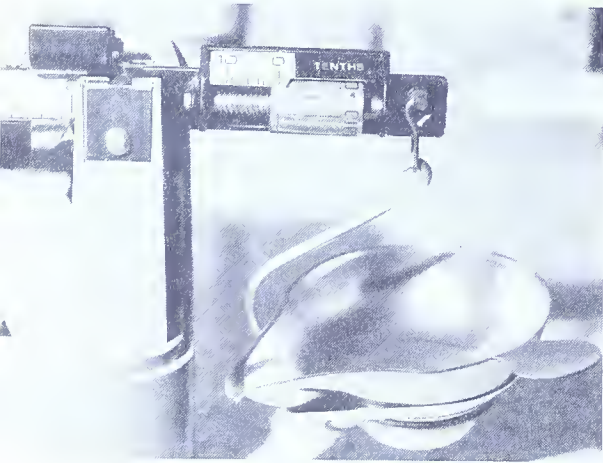
**ACCU-POD** rifle support from Bausch & Lomb is a lightweight bipod that provides excellent stability for varmint shooters. Comes in two heights.

lets for every hunt. Somehow, I feel better and hunt with more assurance when I know I'm using bullets that gave a low runout reading.

Another tool I want to mention is the Lec Loader. With all the emphasis on speed in shotshell loading nowadays, using this little hand operated model is almost the same as going back to the butter churn. Compared to the MEC 650 or the Ponsness-Warren 800B Size-O-Matic, the Lee hand tool has little to offer in the way of mass production. But while the ability to crank out loads in a hurry is of concern to the trap and skeet shooter, there are thousands of hunters who would find the little Lec Loader to be just the ticket. It is made for reloading metallic cartridges, too, incidentally.

My own association with Lee tools has been on a limited basis. In fact, I have the Lee Loader in the 410 bore only, but I know several hunters and benchrest shooters who use Lee outfits exclusively. From what I have done with my own tool and what I have learned from other Lee users, speed has nothing to do with the philosophy on shotshell or rifle loading; they simply load for enjoyment.

I can crank out a box of shotshells in less than two minutes on my big Ponsness-Warren, with a couple assistants, and I suppose the Lee tool user would still be working on the second or third shell, but speed should not be the only factor considered. Handloading is not just how



**OHAUS DIAL-O-GRAIN** scale is easily adjusted and its setting cannot be changed accidentally, as with some models that have a sliding weight.

many shells are loaded, but the pleasure in assembling one's own ammo. Naturally, when I need a hundred rounds of a given load for a shotgun test, I could not in all fairness use the Lee Loader, but the average shooter or hunter, who goes through only two or three boxes a year, would find the Lee tool suitable in every respect.

Simple to use, with no dies or gauges to change, the little Lee Loader sells for just short of ten dollars and makes rifle and shotshell loading a pleasant and simple task. I am not a bit hesitant to say that unless handloading is going to be a major hobby or done on a mass basis, the little Lee hand outfits will give the same relaxation and personal satisfaction as the larger presses.

Another highly satisfactory tool from Lee is his primer seater. It permits the handloader to make a separate function out of this important

act, and this gives closer control than when primers are seated on some of the big tools. The case is slipped into a shell holder head after the primer is deposited in a cavity above a spring-loaded plunger. Simply squeezing the operating handle pushes the primer home. The important thing is that this tool's mechanical advantage is very low compared to that of a reloading tool which is designed to full length size cases, etc. Thus you can feel the primer seating in the pocket and actually tell by your sense of touch when it has bottomed. This prevents crushing the primer cup, as sometimes happens on the big tools, and allows you to maintain a high degree of consistency. The shell holder heads are detachable and come in styles to accept all sizes and designs of cartridge cases—rimless, rimmed, standard, Magnum, etc. Heads are made for both large and small size primers.

### Noise!

One aspect of shooting getting insufficient attention is the noise factor. I know from personal observation that too many shooters are not giving any consideration to protecting their hearing. Not only at the benchrest, but also on the trap and skeet fields, far too many shooters are doing absolutely nothing to prevent serious damage to their hearing.

I'm strong on this now because I'm one of the guilty ones who paid a severe price when I carelessly exposed my ears to the noise from thousands of rounds of ammo before the single crack of a 25-06 Improved damaged my ears to the extent I was deaf for several hours. I have never gotten back my full hearing these many years later.

I'm still amazed at the number of shooters who wave off with a brave hand the offer to wear ear covers. Apparently they feel wearing protection reflects on their manhood. I had such thoughts for years even though my ears hurt after every ses-



sion at the bench. I don't take any chance now.

Several types of protection are available, ranging from total ear covers to ear valves that fit inside the ear. Personally, I prefer the complete cover type. These sometimes have the drawback of hitting the top of the stock and are inconvenient in the sense that normal conversation is also cut out. Ear valves permit the user to hear normal conversation but reduce the high frequency noise caused by shooting.

### Total Coverage

Ithaca Gun Co. has just come out with its Whisper-Pak ear protectors, and the David Clark Co. of Worcester, Mass., manufactures the Straight-away Model 10AS. These are an industrial design, but I've used a set for many years and appreciate the total coverage even though they are somewhat bulky and cut out more low noises than other makes and models.

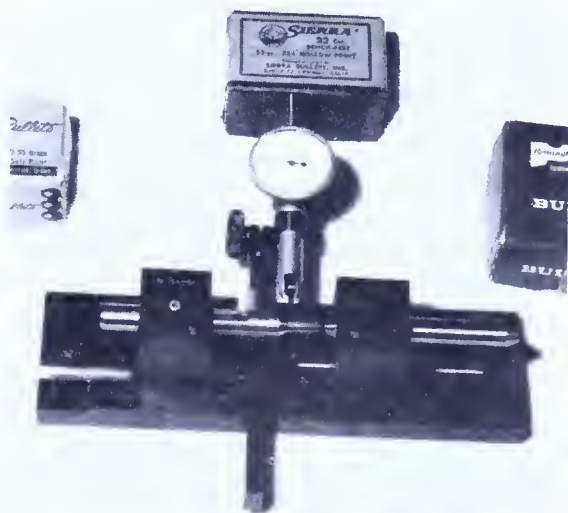
Bausch & Lomb, Smith & Wesson and Herter's, Inc., offer similar units, and doubtless others do too.

By now, it should be evident there is no shortage of ear protectors. Why take chances with the possible loss or damage to your hearing when for only a few dollars either ear valves or ear covers can be purchased at nearly every gun shop. Keep in mind that once hearing has been damaged or lost, there is no way of getting it back. I miss very much the little sounds of the outdoors I once enjoyed, and my loss stems from the foolish act of shooting without ear protectors.

Bausch & Lomb also has a new item for varmint shooters, an extremely lightweight bipod to support the rifle. A foam rubber padded cradle fastens to the fore-end by a wide rubber band and the stem projecting down from the cradle passes through the bipod, where it is held by a wing nut. This allows vertical adjustment over a spread of about

6 to 12 inches. This works very well for prone shooters, and I understand that another model is adaptable up to 16 inches height, which would make it suitable for shooting from the sitting position. The small model I've been using weighs only 5 ounces and can be kept on the gun during a day's hunt with no inconvenience.

Big game hunters who have to be out in miserable weather sometimes have trouble with their scopes. Rain or snow can make aiming through the wet lenses difficult. Many deer hunters use a piece of innertube around the scope to protect it, and that works well in most cases. Those wanting a more professional looking item might consider some lens protectors made by Ed Vissing, of Box 437, Idaho Falls, Idaho 83402. These are neoprene cups that fit over each end of the scope, with hinged covers for the lenses. Just touching a release stud on each as you raise the rifle causes the cover to flip back so you can use the scope. They weigh almost nothing and they work. They're also useful for keeping dust from collecting on the lenses while the gun is standing in a rack.



**BULLET SPINNER** made by John Dewey shows concentricity of bullets to within 1/10,000 of an inch—important to benchresters and a few way out varmint hunters.

Another useful item for those who own a number of scoped rifles, or shooters who have a habit of swapping scopes around, is a collimator. This is an optical device which mounts on a stud that's inserted into the rifle muzzle. It contains a grid of known dimensions which can be seen through the scope. In effect, this lets you see how the reticle relates to the bore of the rifle. Basic adjustments when mounting a new scope assure that your first shot will be on the paper somewhere—though it's rarely in precise zero, as some writers have claimed. However, once

you have zeroed in you can again use the collimator to see where the reticle registers on the grid, and thus use the unit to check zero without firing again, as perhaps after a fall in the woods, if you have the collimator in camp. Or if you keep a record of the zeroes of different scopes on different rifles, you can switch them around and be sure they'll shoot about where you want without having to make another trip to the range. Various manufacturers make these items. The one I've been trying is by Collins Co., Box 40, Shepherdsville, Ky. 40165.

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### Hunting Population Increases

The ranks of American hunters swelled by 3.8 per cent in 1971 to 15,977,588. At the same time, the total U.S. population increased only 1.3 per cent.

## Looking Backward . . .

Wm. Coulter and a Mr. Bartlebaugh were following the tracks of a deer, about ten miles north of this place, on Friday, the 12th inst.; they soon came to the deer, which appeared to have been lately killed by some animals; its entrails were torn out, and its carcass otherwise much mutilated. They soon observed tracks of a wild cat, and tracing them a short distance, it was discovered the cat had entered a hole in a ledge of rocks. A trap was prepared, and set at the mouth of the hole. Next morning, the wild cat, nearly full grown, was found in the trap—fast by the toes of the fore foot. The question then was, how to secure him alive. Coulter directed Bartlebaugh “to amuse him with a stick,” and he thought “he could take one wild cat, for Davy Crockett had licked his weight of them.” The attention of pussy being taken up with the stick, Coulter caught it by the back of the neck, threw it, and got his knees upon it. They then took their suspenders and tied the feet, and Bill pulled off one of his stockings, and drew it over its head; thus secured, they carried it home, and now have it ready for Mr. Van Amburg, whenever he thinks fit to order it. (Indiana Register) (Holidaysburg Register & Blair County Inquirer, Jan. 31, 1849)



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